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ABSTRACT

A 2-year study of small Chicago schools found that small schools, especially small high schools, help students succeed. The study focused on about 150 small schools founded in Chicago during 1990-97 and their progress through 1999. Elementary schools had fewer than 350 students; high schools fewer than 400 students. Quantitative analyses covered demographic data; attendance, retention, and dropout rates; and measures of academic achievement. Ethnographic studies were carried out in eight small schools. Chicago's new small schools served children of color, children from poorer families, and students performing at below-average levels. Schools-within-schools tended to be located in poorly performing schools but attracted the higher achievers in those schools. Teachers had education and experience similar to those of other Chicago teachers. Compared to students in larger schools, small-schools students had better attendance rates, much lower dropout rates, higher grade-point averages, higher high school graduation rates, and lower retention rates at the elementary level. Reading achievement scores increased, and average standardized test scores were holding steady--an improvement since more students were taking the tests. Violence occurred less frequently than in large schools. The intimate environment encouraged learning and increased parent participation and satisfaction and teacher collegiality and job satisfaction. Minimal conditions are outlined for successful start-up and ongoing development of small schools. Cautions and recommendations are offered for policy makers, administrators, external partners, and colleges. Appendices present methodology, control variables, and a glossary. (Contains 25 references, notes, figures, and data tables.) (SV)

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Small Schools: Great Strides

A Study of New Small Schools in Chicago

By: Patricia A. Wasley, Michelle Fine, Pilar Gladden, Nicole E. Holland, Sherry P. King, Esther Mosak, and Linda C. Powell

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dedication

This report is dedicated to **Tom Daniels**, a teacher-director in one of Chicago's fine small schools. He helped many to see what marvelous things underprivileged kids can do when adults create the right learning conditions for them.

acknowledgments

This research project depended on a fine cross-city collaboration between people involved in small-schools work nationwide. We couldn't have undertaken the study without the inspiration and the support of Warren Chapman, Peter Mich, and the Joyce Foundation. This work was done in collaboration with the Consortium on Chicago School Research; they housed us, shared their databases with us, and helped to shape and analyze the quantitative work. Further, they shared their own findings that were pertinent to our study. Tony Bryk and John Easton were generous and thoughtful colleagues. The Chicago Public Schools and staff made it possible for us to spend significant time inside their schools, and made their policies and personnel available to us. The eight small-school communities, including the parents, students, teachers, staff members, directors, principals, and external business and professional partners who opened their doors were courageous and committed. They helped us to understand what is going on inside Chicago's small schools. A number of organizations have shaped and supported Chicago's small schools: Business and Professional People for the Public Interest, Leadership for Quality Education, the Small Schools Workshop, the Small Schools Coalition, and the Quest Center all responded to our plans and then our findings, helping us to negotiate the particular terrain that is unique to Chicago. Other organizations like the Cross City Campaign and New Visions for Public Education responded to our findings and shared the work under way in other cities. More specifically, we'd like to extend special thanks to: Elaine Allensworth, Jackie Ancess, Bill Ayers, John Ayers, Mia Barricini, Anne Buckley, Dick Clark, Lara Cohen, Alan Dichter, Bob Hampel, Fred Hess, Patricia Jones, Augusta Souza Kappner, Kay Kirpatrick, Mike Klonsky, Susan Klonsky, Ruth Kolbe, Guedeila Lopez, Stuart Luppescu, Ruth McCutcheon, Deborah Meier, Shazia Miller, Jenny Nagaoka, Fred Newmann, Jeanne Nowaczewski, Will Palmer, Frank Pignatelli, Mary Ann Raywid, Gil Schmerler, Robin Steans, Cheryl Trobriani, Sarah Vanderwicken, and Olivia Watkins, who are among the people who responded to and assisted in our work. Their insights and experiences helped to place this work in a local and national context.

With**Appreciation**

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introduction

The school building is old, but newly refreshed. It is cheerful, welcoming. It sits in an old section of the city where, at one time, beautiful homes graced wide streets with long, lazy green stretches of lawn in the middle. Some of the homes are being regentrified. Others are boarded up, waiting. Not two blocks away is a street of shops, completely burned out during the riots in the late 1960s…a modern ghost town evoking despair, anger, and injustice. The whole school houses some 600 students, in two different schools. One is a new small school and that is where we head. As we turn down one hall that houses the new small school, we note that the school looks hopeful—there are brightly colored bulletin boards introducing all of the children in the school by name and by picture. It is important here that everyone be known. This school does in fact hold many of the hopes that the neighboring community organization, a partner to the school, has invested in it. They believe that for a neighborhood to be viable, it must have schools the local community trusts and is willing to work with. The community organizer, who spends much of her time in the school, watches proudly as a group of children troop in to talk with us. They are eight years old and attend third grade. They are all African-American, gorgeous in maroon-colored uniforms. As they warm up, they tell us about their school. This school is about challenges, they tell us. What does that mean? We ask.

"Challenging work is hard."

"Yeah, it makes you scared because you might get the wrong answer!"

"And we need to pass to get to the next grade!"

Everything is an exclamation with these kids. Give us an example of hard work, we ask. Maria brings out her multiplication homework.

"Some of the problems are hard and complicated. I don't like to guess and get things wrong."

Nicole adds:

"I just take a deep breath and do it in my head. I learned all the steps I need to do it right."

Christian shows us a problem in the book.

"I can't always do well because I don't know all the big old words that are in the problem. When I get stuck, I get a piece of scrap paper and try to work the problem out. Daniel helps me sometimes in class and at home."

Ebony changes to division.

"Division is hard because of the big numbers. Every night I practice at home and my mom helps me. A lot of division and reading goes on in my head."

Daniel responds:

"Reading is challenging. I'm always doing the other assignments before reading. I read every night for a half an hour like my teacher tells me. I like action-packed books. I have trouble on some books. Goldilocks and the Three Bears is easy. Goosebumps is a hard one. I take a longer time to read hard books. I choose 'em myself at the library. What I really like is science and electricity and magnets, because they move things around."

The kids are leaning in and on one another, gathered around us, interested and interesting. They like their teachers and feel proud of their small school. Why is this school different? we ask.

"There are less kids in the classroom."

"It takes up less space because it is smaller and you can't get lost."

"In the morning we have meetings to share stuff and talk stuff over."

Most of them have been to two or more schools prior to this one. They don't want to move around anymore, because this school feels "Like home!"

"Safe!"

"Good!"

"Grrrrreeaaat!"

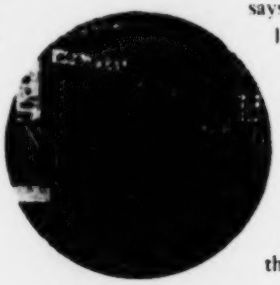
Over a two-year period, from 1997 through 1999, we studied new small schools—schools housing fewer than 350 students—which are sprouting up all over the city of Chicago: some 150 at our last count. Chicago joins cities like New York, Philadelphia, Boston, Atlanta, and others that are in the midst of a ferocious debate about whether public education is still viable. Urban educators

in these cities are creating small schools because they believe that public education is critical to a democracy but that viability requires an important shift so that adults can attend more closely to children. These educators believe that, while school size is not sufficient in and of itself, it is an essential first step in creating productive, equitable places where young people can actually flourish.

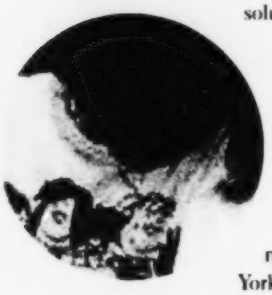
Currently, urban schools are plagued by high drop-out rates, increased violence, low achievement levels, low levels of student engagement, and inequitable standards (Fine, 1991). The children of poor, working-class families and recent immigrants are the children most often attending urban schools. Further, the children for whom we most often fail to provide adequate education are predominantly children of color. Most of the schools these kids attend are large. The average size of a school in this country is 741 students, but it is not uncommon for young urban children to attend schools of 500 to 1,000 elementary students, and high schools ranging from 800 to 3,000 students. There are three essential problems that these educators believe small schools address. First, despite decades of attempts to improve learning conditions inside large urban schools, they are still among the lowest performing schools in this country. Despite recent state and national efforts to increase standards, test scores remain low. A number of studies document that our nation's schools are impersonal places where far too many children slip by unnoticed or drop out. Adults are often more concerned with control than with children's intellectual development (Fine, 1991; McNeil, 1986; Powell, Farrar, and Cohen, 1985; Sizer, 1995). Second, the most horrifying recent development in large schools is the increase of violence. Columbine, seared into our consciousness, reminds us that when children are not known well enough by the adults who care for them, the alienation that they experience can have devastating consequences. Every few months in recent years, we've been bombarded by horrifying instances of violence, most of them in large, impersonal schools. Third, conditions in large schools are less than desirable for the adults who work in them. Currently, we face the greatest teacher shortage ever, and we must do everything in our power to provide bright, well-qualified teachers for all our nation's children (*What Matters Most*, 1996). In the current economic climate, it is too easy for those who have traditionally entered teaching—women, recent immigrants, minorities—to choose other careers. Unfortunately, it is clear that large schools do not foster appropriate growth for teachers. Isolated from other adults, many drop out within the first five years or, given the lack of collegial stimulation, they develop set patterns and routines, developing a limited range of strategies to foster students' skill and knowledge. This, in turn, contributes to the lack of engagement many students experience (Goodlad, 1986; Wasley, Hampel, and Clark, 1997).

Why create small schools? Above all, in order to address four specific problems: to create small, intimate learning communities where students are well known and can be pushed and encouraged by adults who care for and about them; to reduce the isolation that too often seeds alienation and violence; to reduce the devastating discrepancies in the achievement gap that plague poorer children and, too often, children of color; and to encourage teachers to use their intelligence and their experience to help students succeed.

If we take a look at the history of small schools in this country, the strategy would seem a safe bet. Throughout the history of schooling in this country, parents of means have insisted that their children attend smaller schools. In Powell's important book *Lessons from Privilege*, he says, "...Independent schools are small, or at least broken down into small-scale settings within a larger institution. Teachers are responsible for far fewer students...one of the most telling statistics in American Education," (Powell, 1996, p. 245). He goes on to say that prep schools have a strong commitment to personalized education—to knowing the students well enough to spur them on to heightened achievement and to



connect them to adults who care for them and can give consideration to students' special learning needs. Independent schools are even smaller than affluent suburban schools. In 1988 the average prep-school size was 399, compared with 752 in suburban schools. In high schools, where anonymity is perceived to be a significant detracting characteristic, prep-school size is even smaller: 298, compared to 1,309 in suburban schools. Catholic secondary schools on average serve 546 students. In contrast, public secondary schools serve an average of 845 students. Moreover, only 15 percent of Catholic secondary schools serve more than 900 students, while 40 percent of public secondary schools do (Bryk et al., 1993). Given these comparisons, many educators placed bets that smaller school size fosters more personalized learning environments and more impressive achievement. The fact that small school size has been a priority in private schools suggests that small school size might well offer a promising solution in public schools.



CurrentResearch

This study was undertaken at a time when the small-schools movement was just gaining momentum nationwide. It began in New York, spread to Philadelphia, then to Chicago and other cities. Those involved believed that in small schools, kids would be less likely to get lost, violence would be curbed, and achievement would be enhanced. Teachers could develop better connections between home and school, better understand kids' strengths and weaknesses, provide better support for both, and learn more from each other, creating a more exciting and vibrant career. A good deal of research has already been conducted on the effectiveness of small schools. There are several consistent research findings. In July 1997, Raywid reported that "disadvantaged students in small schools significantly outperformed those in large ones on standardized basic skills tests." Second, small schools appear to be more educationally equitable in closing the achievement gap separating students by social class and racial and ethnic groups (Lee and Smith, 1994; Lee, Smith, and Croniger, 1995). Indeed, a study about elementary-school size and the effects on academic productivity by the Consortium on Chicago School Research finds that, "for both reading and math, small schools produce greater achievement gains than larger schools holding demographic and teacher characteristics constant so that this effect is independent of the particular students and teachers at the schools" (Bryk et al., 1999, p. 21). Further, a newly released study has shown that small schools help to decrease the detrimental effects of poverty on student achievement and close the achievement gaps between less affluent students and their wealthier counterparts (Howley and Bickel, 2000). In addition, a New York City study documented that small schools are fiscally more efficient once economists calculate costs by graduates (Stiefel et al., 1998). It is far more expensive to allow a student to drop out than it is to invest whatever it takes to ensure that student's graduation.

Research on small schools has identified other advantages as well. Smaller school size is consistently related to stronger and safer school communities (Franklin and Crone, 1992; Zane, 1994). The National Center on Education Statistics reported marked reductions in teacher and principal reports of incidents of fights, weapons, and other forms of violence in schools of 350 or fewer as compared with 750 or more (NCES, 1976). Data from a recent Department of Education survey state that "1 out of 3 schools with 1,000 students or more reported incidents of serious violence (e.g., armed assault, gang fight, rape, etc.), and almost all reported incidents of lesser violence (e.g., fights without weapons, threats, etc.)" (NCES, 1998). Compared to larger schools, students in smaller schools fight less, feel safer, come to school more frequently, and report being more attached to their school (Gottfredson, 1985). Since Littleton, the trend has been to militarize schools by adding more police presence, metal detectors, video cameras, and zero-tolerance policies. While some of these strategies help students and parents to feel safer, a recent study entitled "Maximum Security" shows that militarization may be harmful because it creates an expectation of

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violence (Devine, 1996). Teachers also report better collegial relationships in smaller schools (Bryk and Driscoll, 1988). Although not all small schools enhance the educational opportunities afforded students (Fine and Somerville, 1998), on average, students attending smaller schools complete more years of higher education (Sares, 1992), accumulate more credit (Fine, 1994; Oxley, 1995), and score slightly better on standardized tests than students attending larger schools (Bryk and Driscoll, 1988; Fine, 1994; Lee and Smith, 1996; Sares, 1992).

This combined research suggests that the small-schools strategy is achieving encouraging results. (For a more extensive review of the research, see Gladden, 1998.) Given these findings, we hoped to build on and contribute to the work on small schools. We believed that a mixed-method study, gathering both qualitative and quantitative data, would contribute important comparative information. We intentionally set out to create the largest database on small schools to date, so that we might be able to move from the particular to the general. We wanted to look in one city for a brief duration, but in greater depth, so we could either corroborate or contradict what others have already suggested in order to learn more fully about the potential of this particular innovation as a strategy for improving urban public education.

We decided to focus our work in Chicago because, education-wise, it is representative of many cities in the United States: Many inner-city students have not been performing satisfactorily. In Chicago, as in other cities, there is a major effort being spearheaded by the mayor and the CEO of the school system, Paul Vallas, to increase performance and accountability. A number of collaborations are under way within the district and in the surrounding community to support the development of small schools as a potential strategy in moving toward more equitable and effective education. Teachers and administrators have been motivated to try new approaches that might actually work. Parents have been selecting small schools for their children because of their belief that they might work better. External partners have been offering a variety of kinds of support to the city system. While Chicago is, like all cities, unique, its strategies should provide knowledge and understandings about the small-schools strategy that would be applicable to other settings.

Our findings are very encouraging. These small schools increase student attendance rates and significantly increase student persistence and student performance. More students complete courses, get higher grades, and graduate. Further, parents, teachers, students, and community members alike are more satisfied with their schools, believe in them, and want to see them continue to grow. Such results both corroborate earlier findings and provide enormous hope. What follows is a detailed analysis of our findings and recommendations. We hope that small schools, given their ability to strengthen young people's chances, will continue to make great strides.

section 1

The Methodology, History, and Context

Methodology

We designed a two-year study in three parts. First we had to build an actual database that would allow us to identify small schools and separate them from the larger system. We constructed a map of Chicago's public small schools, documenting the variety and geographic locations of small schools existing during the 1990s, and we identified and classified the different types of schools.

Second, we looked at a variety of indicators of school performance, such as dropout rate, absenteeism, and standardized-test performance. Analyses that focus solely on standardized achievement run the risk of falsely labeling schools as "good" even though they might have high dropout rates and graduate only their highest-achieving students. Only by simultaneously looking at dropout rates with standardized achievement can insightful analysis of a high school's performance be conducted. Using data collected by the Consortium on Chicago School Research (CCSR), we constructed a quantitative database for small schools that would allow us to make comparisons in 1997 and 1999 between different types of small schools and the larger system. This database contained information on the demographic profiles of small schools, such as racial composition, percentage in special education, and the socio-economic status (SES) of the neighborhoods from which the students came; indicators of school progress, such as attendance rates, retention rates, and dropout rates; and measures of academic achievement, such as high school grades and standardized-test scores. The quantitative analyses focus on small schools founded between 1990 and 1997 and track their progress through 1999. While a substantial number of new small schools opened in Chicago between 1998 and 1999, and while we analyzed the performance of the new small schools, we focused on the schools founded by 1997 because we wanted to be confident of the accuracy of our data. We know that it takes time for new schools to become stable, to implement their vision, and to begin to have an impact on student outcomes. We did not want to evaluate the new small schools prematurely and dilute possible small-school effects by including new schools along with schools that had existed for three or more years.

The third part of the study involved an ethnographic analysis of a set of eight small schools in order to understand what is actually happening inside these settings. The students and school characteristics that were used as statistical controls are listed in Appendix A. (See Appendix B for a more in-depth description of the methodology.)

Research Questions

Our study was framed by the following overarching question:

- What is the relationship between small schools and student achievement in Chicago?

To explore this question more fully, we asked a number of secondary questions:

- Where are Chicago small schools located? Who are the students and teachers in those schools?
- What are the indicators that allow us to understand student achievement in a small school?
- What changes are teachers and principals making in small schools that they believe have a positive impact on student achievement?
- If there is a relationship between school size and student achievement, how do these effects differ between elementary and high schools?
- Under what conditions can small schools successfully revitalize a school system?
- Might small schools be a systemic approach?

A Brief History of Small Schools in Chicago

Historically Small Schools Are More Successful. Small schools have existed in Chicago at the elementary level for a long time. These schools, which we refer to as *historically small schools*, serve 350 students or fewer, are freestanding and are not alternative or special-education schools.

The average elementary school in the Chicago Public School (CPS) System serves students from census tracts with an average 1990 family income of $25,616.[1]

In contrast, historically small schools serve students from an average income of $32,367. Moreover, historically small schools are located in neighborhoods that had lower crime rates in 1994 and a lower percentage of people on public assistance in 1997.

In addition to serving students from less impoverished families and communities, historically small schools educate integrated student bodies more often than other elementary schools in the system. Twenty-six percent of historically small-school student bodies consist of 30 percent or more white students, while only 13 percent of the schools in the system have student bodies composed of 30 percent or more white students. Moreover, more than 22 percent of small schools are magnets; in contrast, approximately only 6 percent of the other public elementary schools in the system are academic magnets.

Students in Chicago's historically small schools achieve at high levels. On average, 48 percent of students attending historically small schools scored at or above national norms in reading in 1997. This exceeded the system average in 1997 of 30 percent and approaches the ultimate goal of the system to have 50 percent of its students reading at or above national norms in reading.[2]

One might argue that the academic success of historically small schools in Chicago is attributable to the more economically advantaged populations that they serve rather than their organizational structure. Research, however, demonstrates that small-school environments, controlling for student demographics, are more favorable learning environments than those of large schools (Sebring, Bryk, and Easton, 1995). Small schools made greater improvements in their academic performance than larger schools between 1991 and 1996, even after controlling for their demographic and academic profiles (Bryk et al., 1999). Our research supports Bryk et al.'s, findings, revealing that historically small schools produced higher one-year gains in both math and reading than larger schools in 1997 and 1999, even after controlling for their demographic profiles.

Before the Chicago small-schools movement began in the 1990s, the historically small elementary schools provided strong evidence that smaller school size can help lead to higher levels of academic achievement. Reformers cited the positive achievements of historically small schools in Chicago to press the idea of creating new small schools as a reform strategy (Easton and Bryk, 1999). The questions confronting members of small-school communities were whether they could create new small schools in the existing CPS system and whether these new schools could replicate the success of the historically small schools.

The New Small-Schools Movement

As part of the 1990s small-school movement, more than 150 small elementary and high schools were created. These schools targeted impoverished neighborhoods and students of color (see Figures 1 and 2). A brief history of Chicago school reform helps to establish how these new small schools came into being.

In 1988 the first Chicago School Reform Act became law. Drawing on the energy and opportunity generated by this law, a professor from the University of Illinois at Chicago, along with a community organizer, introduced the small-school concept to Chicago and began to mobilize educators who were interested in starting these schools. Foundation support was secured to launch the Small Schools Workshop at the University of Illinois at Chicago. The goal of the workshop was to assist educators wanting to start small schools by supplying information, sharing technical assistance with teachers and providing advocacy with top-level central-office staffers to promote policy changes. A small-schools conference hosted by the Quest Center (the professional-development arm of the Chicago Teachers' Union) brought more educators, particularly principals, into the movement. The early '90s saw the formation of several schools-within-schools (SWS), reflecting a range of instructional approaches and curricula.

Figure 1: Elementary Small Schools Created After 1990 as of 1998

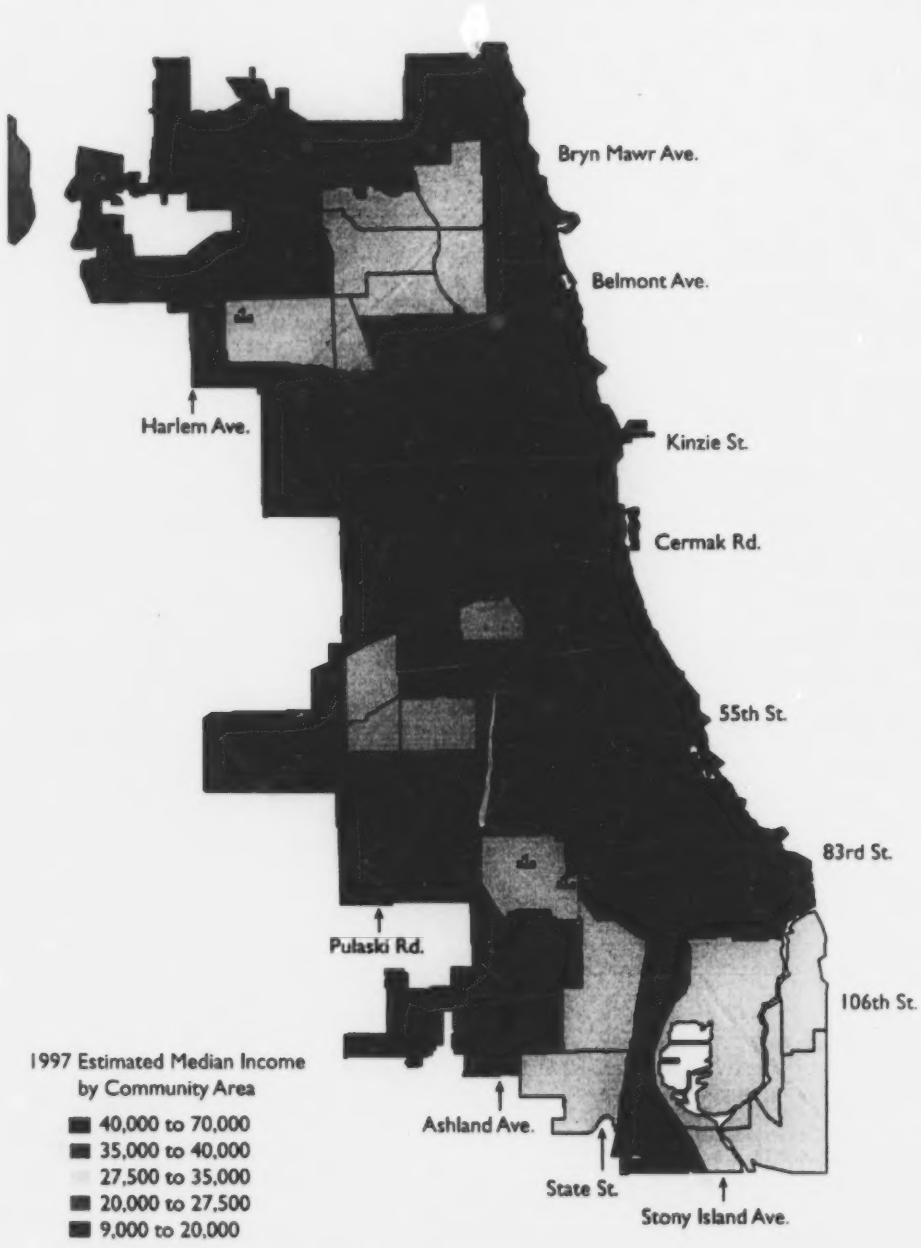
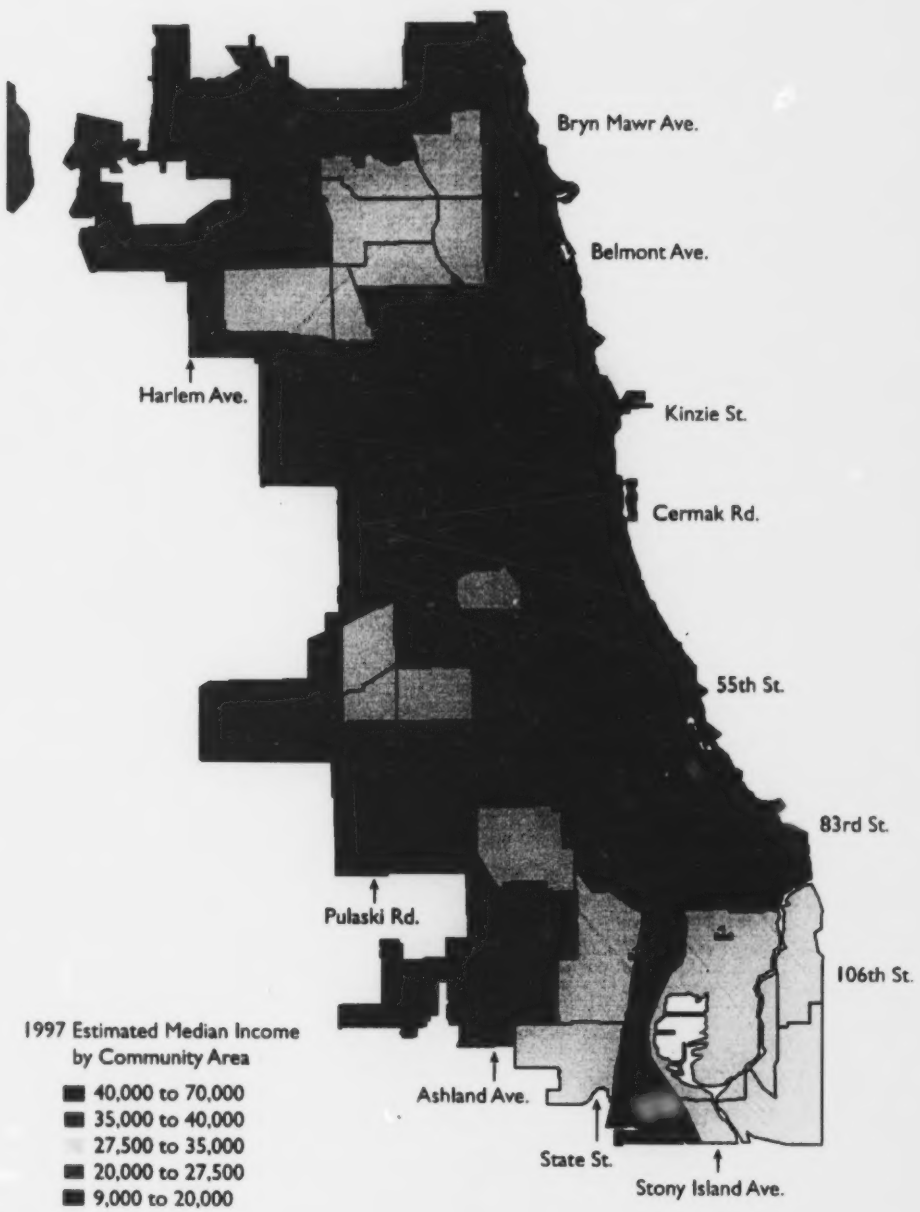


Figure 2: Small High Schools Created After 1990 as of 1998



Several Chicago-based community and advocacy groups offered their support of small schools. Business and Professional People for the Public Interest (BPI), Leadership for Quality Education (LQE), the Small Schools Workshop, the Quest Center, and several other organizations worked to support the small-schools movement. Collectively they formed a coordinating organization, the Small Schools Coalition, to further mobilize support for small schools in Chicago.

The second "wave of reform"—the 1995 Chicago School Reform Act—lodged responsibility for Chicago schools' performance in the office of the mayor. The idea of accountability to local communities shifted to an accountability based on "standards" and centralized management. Mayor Richard M. Daley appointed a five-member School Reform Board of Trustees, with a management team led by Chief Executive Officer Paul Vallas, the mayor's former budget chief.

Early in its tenure, the new board, responding to the efforts of the small-schools advocates, issued a resolution stating its commitment to "assisting in the formation and strengthening" of small schools in Chicago. The resolution described small schools as "characterized by (1) a small number of students, usually no more than 100-350 in elementary schools and 500 in secondary schools; (2) a cohesive, self-selected faculty supported by like-minded parents; (3) substantial autonomy as to curriculum, budget, organization, personnel, and other matters; (4) a coherent curriculum or pedagogical focus that provides a continuous educational experience across a range of grades; and (5) an inclusive admissions policy that gives weight to student and parent commitment to the school mission" (Resolution, 1995).

This resolution was followed by a Request for Proposals (RFP). Twenty-four proposals were approved, with planning, start-up, and support grants awarded. Small schools in existence before the resolution continued to grow, and others have developed since. To date, the board lists more than a hundred small schools on its roster. Between 1997 and 1999, the board's Office of Special Initiatives was charged with providing support to small schools, often in the form of professional-development services and support in meeting board policy, as well as data collection on small-school structure and performance. As documented in BPI's Small School 1999 Directory, Chief Executive Officer Vallas, board President Gary Chico, and Mayor Daley have all publicly endorsed the small-school idea.

Mr. Vallas states:

> "*We are proud of what our small schools are accomplishing and hope to see more large schools embrace the small-school philosophy.*"

Mr. Chico comments:

> "*We know that small schools are good for our students, our teachers, and our families. They are safe places where teachers can be creative, and they help on all the core issues important to us: They improve attendance, discipline, and help raise student achievement.*"

And, according to Mayor Daley:

> "*Smaller is better. The board needs to look at smaller high schools and schools-within-schools.*"

A third legislated opportunity provided additional impetus for the small-schools movement. Some small schools have taken advantage of the 1996 Illinois charter legislation to create new public schools free of all central-office mandates other than accountability in finance and in performance as measured by standardized-test scores. According to BPI, "Charter schools are public schools open to all students. However, they are freed from the complex regulations that often constrain schools by a 'charter' or contract between the school and school district. Charter schools are held strictly accountable to this charter [agreement], which also identifies the school mission, objectives, and methods of documenting progress" (BPI, Small Schools Directory, 1999).

According to the Illinois State Board of Education Web site, "While 13 [charter] schools were in operation in 1998-99, 17 schools should be in operation in 1999-2000, with one more already chartered for 2000-2001. Of the

17 charter schools already in operation, twelve are in Chicago, three are downstate, and two are in the suburban area. There are 27 remaining charters available in Illinois. With the passage of Public Act 91-407 (HB 230 of 1999), school districts, like not-for-profit organizations, may now be sponsors of charter schools. Illinois also received a second three-year federal grant award for public charter schools. The grant award for 1999-2000 is $1.14 million; for 2000-2001 it is $1.2 million; and for 2001-2002, it is $1.25 million."

The recent creation of charter schools, which are held accountable to the public and CPS through a five-year contract, has significantly increased the number of new freestanding small schools. Between 1997 and 1999, three small elementary schools, one small high school, and two small junior-high/high schools have been opened as new freestanding charter schools.

Since 1995, Chicago has implemented a strong centralized evaluation system. Aspects of this system include placing schools on probation if fewer than 15% of their students score above national norms on standardized reading and math tests, reconstituting high schools (i.e., closing, restaffing, and reopening chronically poor-performing schools), and setting promotional standards for 3rd, 6th, and 8th graders (i.e., students at these grades are advanced to the next grade only if they score above a cutoff on their math and reading standardized tests). The CPS board has allocated funds to help schools meet these evaluative criteria. Schools on probation are required to hire an outside partner to help them reform their school. Students who fail to pass the promotional standards at the end of the school year are offered summer school classes and a second chance to pass the test at the end of the summer. Under these mandates, the standardized scores of both elementary and high schools have consistently risen over the last few years.

In the current test-driven climate, schools in Chicago, like others nationwide, are feeling intense pressure to meet test-score requirements determined by the central office. Furthermore, elements of the Local School Councils (LSCs) mandate, such as principal selection and budget, are increasingly being taken over by the CEO in an effort to reach higher standards. It is within this political context that small schools have been emerging in Chicago.

Small Schools Come in a Variety of Shapes and Sizes

The small-schools in Chicago take a variety of forms (see Table 1). It is important to understand the distinctions between these types of small schools in order to understand consistent trends that have emerged. These schools challenge us to redesign our own thinking about schools as buildings.

Some small schools are *freestanding*. Like conventional schools, these small schools have their own space, budget, and principal. Three new freestanding small high schools and five small elementary schools opened between 1990 and 1997, bringing the total number of freestanding small schools to 53. Some freestanding schools are housed inside of one larger building. Some of these are housed in a *multiplex*, where schools share a building and a principal but have their own unit numbers and operate independently from the other schools in the building. For analytical purposes, we treat small schools housed inside multiplexes as freestanding schools because they enjoy the same budgetary autonomy and official recognition as regular CPS schools.

Another type is the *school-within-school (SWS)* in which the small school is located within a larger school—the latter often being referred to as the host school. The majority of small schools in Chicago are SWSs that have their own mission and curricular focus but do not operate independently from the larger school, and remain subject to the budget and overall leadership of a building principal and LSC.

Schools-within-schools can be *multischools*, meaning the entire building is reconfigured into small schools, or they can have a small-school-host relationship whereby one or a few small schools co-exist with conventional classrooms in the rest of the building. At the elementary level, the

majority of the multischools were created by dividing their schools by grade level (i.e. elementary-school grades, middle-school grades), and a few were divided into a variety of SWSs that are distinguished by different thematic and curricular foci.

A large number of elementary and high schools that did not possess SWSs in 1997 reported operating SWSs within their school in 1999 (see Table 2). In addition, three new freestanding elementary schools, one new high school, and two junior-high/high small schools opened between 1998 and 1999.

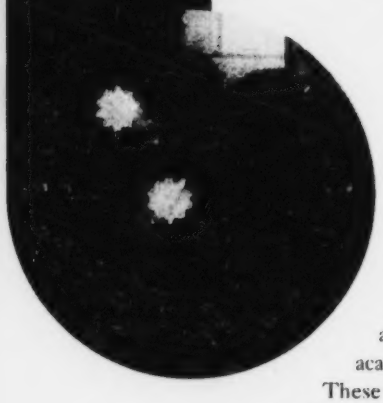
Small Schools Are Organized in a Variety of Ways

Elementary Schools. In 1999, the vast majority of elementary SWSs located in host schools were formed around specific instructional themes or philosophies. Fifty-two percent of the SWSs serve either two or three grade levels, and 24 percent of these schools serve five grade levels. The majority of the schools that serve two or three grade levels are junior high schools with students in grades six through eight, and almost all of the schools with five grades were early elementary schools serving kindergarten or first grade through fourth or fifth grade. Out of 25 SWSs, only one serves kindergarten through eighth grade. Schools-within-schools located in elementary multischools were divided into smaller grade-level divisions. Seventy-seven percent of the SWSs located in multischools serve only two or three grade levels. The typical multischool model divided the school into three separate small schools—the first SWS serving kindergarten through third grade, the second serving fourth through sixth grade, and the third serving seventh through eighth grade. Unlike SWSs located in host schools, the vast majority of SWSs located in multischools were built around grade levels, not themes.

High Schools. Currently at the high school level, 65 percent of SWSs serve tenth through twelfth grade; 25 percent are full schools, and 10 percent serve ninth through eleventh grades. These SWSs were predominantly organized around vocational themes and various professions, and seemed to exclude freshmen for two major reasons. First, this process enables the SWS to recruit from freshmen at their high school instead of going through a laborious effort of recruiting eighth graders. Second, the school is able to recruit students after they have successfully made the transition to the demands of high school. Similar to the majority of SWSs in hosts, the three multischools in the sample divided

Table 1: Number and Types of Small Schools in 1997

	1997 Elementary		1997 High School	
Type of School	Number of Buildings	Number of SWSs inside Building	Number of Buildings	Number of SWSs inside Building
Freestanding	5	—	3	—
Hosts and SWSs	23	32	8	22
Multischools	12	54	3	27
Historically Small Schools	45	—	0	—



their schools into freshmen academies and theme-based sophomore-through-senior academies. The freshmen academies were designed to help ninth graders acclimate to high school and new academic experiences (e.g. scheduling). These academies also helped to educate the freshmen about the various SWSs in the high school so that the students could make an informed selection as to the SWS they would attend their sophomore year.

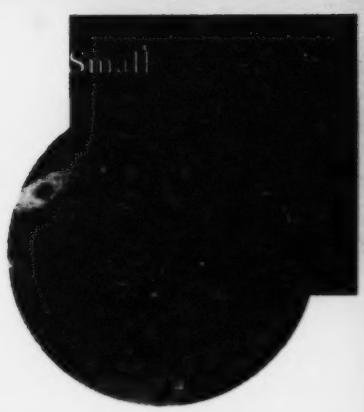
A few of the new charter high schools are designed differently than regular schools. Two of the new small charter schools have combined a junior high and high school into one school. Students can attend this school from the sixth to the twelfth grade. By combining junior high and high school, these schools ease students' transitions into high school and hope to build a strong student commitment toward the school in junior high that will carry through high school. Moreover, the high school enables the school to extend its middle-grade teaching philosophies to high school education. In elementary small schools, teachers often worry that their students will not get the same quality of personalized education at the secondary level they received during elementary school. The combined middle school/high school provides greater affiliation and reduces the number of transitions that youth have to make.

Table 2: Number of Small Schools that Opened between 1998 and 1999

	1997 Elementary		1997 High School	
Type of School	Number of Buildings	Number of SWSs inside Building	Number of Buildings	Number of SWSs inside Building
Freestanding	5*	—	3–	—
Hosts and SWSs	14	19	8	17
Multischools	13	43	0	0

* 2 of the 5 new elementary schools also served high school students.

– Three other high schools opened in 1998 that, by their size, qualify as small high schools. One is a newly opened magnet and was excluded from the sample because of its exclusive admissions policy. A charter designed to help students with drug-abuse problems was open only briefly before being closed. The quick closure of the school coupled with its unique mission led us to exclude it from the sample. The final school is a new small freestanding high school opened in September 1997. We excluded it from the sample because its enrollment was still growing and the school's ultimate enrollment was not clear.



section II
The Findings

Driving east of the city center we pass large warehouses. We pull in to a parking lot facing a big, colorful sign designating a new charter school. Inside, the halls are painted in bright colors. A dog owned by one of the co-directors bounds down the hall in between kids who pat him and yell greetings to one another. This is the second year for this school. It houses students from grades seven to twelve, approximately 135 African-American and Latino students in all. A group of students joins us in the teacher workroom to talk about their school.

Vanessa:

"I came from Eisenhower. I had over thirty kids in my class, which is a lot. Then my cousin told me about this school."

Anthony:

"I went to Lake Park. That is a magnet school, really big. I liked it, but my mom made me switch because there was gang stuff going on and the teachers couldn't give enough time to kids who needed help."

Michael has been in the school for two years and says that this year is better:

"Last year, we had the same teacher for math and science. This year we have two teachers for each subject, and that means that they can spend more time with us."

Deirdre corroborates his comments:

"Last year was hectic getting everything up and running. There are more resources this year. The library is open and we can use it for research and we have a computer lab that is really cool. Our teachers have more time for us. For instance, we had to do a portfolio to show our work in the overland travel unit. We had to summarize everything we learned, which makes you think about what you learned. We did math stuff in that unit and had to use a graphing calculator. Our teacher made us solve the problem with the graphing calculator and then without it and then think about which way was most efficient, easier—like that".

What else do the students do here? We review for tests, they say.

"In seventh grade, we are reviewing main ideas. There are five tips on how to take the test. Take your time; don't rush. Go back if you have extra time. Look for main ideas. Read the test question carefully."

What makes this school different? "Our co-directors made up these rules for a disciplined life. It's pretty helpful, and we have to live by it. Challenge each other. Respect each other's differences."

Anthony:

"There are fewer people in our classes and in the school. Teachers respect and listen to you. If we have disagreements with someone, you fill out this form to get some help mediating a dispute. When I first got here, this girl liked me but I didn't like her. That made her mad and she began whispering things about me. Then I didn't like that, so we found a way to solve it by talking about it."

Deirdre:

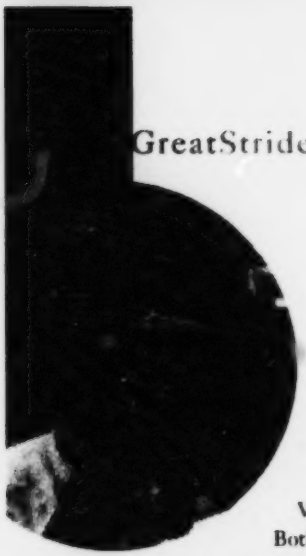
"Our parents have to give two days of time to the school. They go on trips, participate in fundraisers and carnivals. They work in classes. Ms. Williams helps us with lunch sometimes. Sometimes they are too involved and they check on you, and that is annoying."

Kienan:

"Everybody in this school knows you and you know them. We have 135 kids here, with a max of 150. We don't have to worry about gangs or drugs or metal detectors. We have had only two fights, and they got solved quickly. This school is safe for everyone. If you don't live up to the disciplined life code, this may not be the school for you."

Vanessa:

"I never liked to read, but we have to read for half an hour every day. We had to do that in my old school, too, but we never did it. We just talked instead. But here, you have to read, and so now I am and it is more interesting. It's even relaxing. We just finished reading Romeo and Juliet, which Shakespeare wrote, and the high school did a play for the middle school. We did tableaus where you act something out, then freeze the frame and then act out the end. It helped us to think about the period in time—Elizabethan—and the costumes, and then you understand the play better."

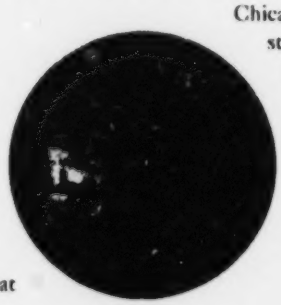


Madeleine is in her third year of teaching and agrees to talk with us during her planning period in a new small school. She spent one year at Eastern High and another at Valley High, a large suburban school. Both had more than 1,500 students. She took the job in the new small school she is currently working in because:

"Here I have 70 students instead of 150, and I can use the Integrated Math Project (IMP) curriculum. Workshops have been organized for us through the Small Schools Workshop at the University of Illinois to learn to use IMP. I think it is a terrific curriculum, as it engages the students so that lower-ability students learn. The top kids do, too, but they would have learned it any way we taught it. This approach is much more engaging, more fun, and it helps kids to investigate math, which is important."

"The teachers here can work as a team. We make curriculum decisions together. We're not as coordinated as we want. For instance, I have not worked with the middle-school teacher yet. I think she has her own approach, but eventually we want to go over what she does and what we do at the high school. But it is easy for me to work with other high school teachers, and we try to do stuff together because it strengthens the messages to the kids. The English teacher had kids write a paper on bees which had some math in it, and both the humanities teacher and I scored it. It is just as important for the kids to write well in math as it is in other courses. We all want them to love learning, to be critical thinkers, and we're making progress, but we do have a long way to go. Still, working here, as compared to Eastern High, I think we can actually make it."

In this section, we examine the following: Who's in the Chicago small schools? What's the relationship between school size and student achievement? What are the conditions in small schools that most affect students, teachers, and parents? What do successful classrooms look like? What role do external partners play in small-schools development? Each section begins with a summary of the findings and is followed by a more detailed description.



Findings: **Profile of small-school teachers and students.**

The new small schools in Chicago:

- serve children of color;
- serve children from predominantly African-American schools at the high school level;
- serve children from poorer families;
- serve students who are achieving at levels below the average student in the system;
- were more likely found in poorly performing schools;
- tend to attract more academically prepared students when they are schools-within-school (this applied especially to schools on probation);
- have fewer special-education students than the system average;
- employ school-within-school teachers who have similar academic backgrounds as teachers in their host schools; and
- employ teachers who have worked outside the CPS system.

When we began the study, it became apparent that there were many suppositions about who was in the new small schools. Some believed that small schools took only the best students, while others believed that these schools attracted the best teachers. In contrast, educators working in small schools and small-school advocates insisted that the new small schools in Chicago educated traditionally disadvantaged students. This section explores this question in two ways. First, we examine which types of schools housed small schools or divided themselves into multischools. Second, we compare the academic preparation of small school students to that of students in the rest of the system; for SWSs, we compare those students to students in the host school.

Table 3: 1997 Iowa Test of Basic Skills (ITBS) Performance

Type of School	# Schools	Avg. Grade Above/Below Grade Level in Math*	Avg. Grade Above/Below Grade Level in Reading*	% of Students At or Above National Norms in Reading
Hosts SWSs	23	-0.64	-0.86	25.2
Multischool	12	-0.62	-0.84	26.9
Freestanding	4	-1.04	-1.17	20.1
Historically Small Schools 45	45	0.07	-0.05	48.1
Rest of System	389	-0.47	-0.71	29.1

Table 4: 1997 TAP Performance

Type of School	# Schools	Avg. GEs Above/Below Grade Level in Math*	Avg. GEs Above/Below Grade Level in Reading*	% of Student At or Above National Norms in Reading
Hosts SWSs	8	-1.93	-2.41	15.7%
Multischool	3	-2.41	-2.69	9.7%
Freestanding	3	-1.24	-1.80	16.3%
Rest of System	49	-1.62	-2.08	18.8%

* The ITBS and TAP are scored on a grade equivalent (GE) normed scale such that "grade level" is defined as the median score for a representative national sample of students enrolled in a grade. The scale reports the scores in terms of grade and month such that the median score for fifth grade (5.8) is interpreted as fifth grade level, eighth month of instruction. The distribution is then scaled in one-month increments. For instance, a fifth grade child scoring a year below the median (4.8) demonstrates the skills of a student who has received eight months of instruction in the fourth grade. Conversely, a fifth grade child scoring a year above the median (6.8) demonstrates the skills of a student who has received eight months of instruction in the sixth grade. The "grade level" norm centers on .8 plus the grade instead of the grade (i.e., on 5.8 instead of 5.0 for the fifth grade) because the ITBS and TAP are administered in the eighth month of the school year.

Small schools are likely to be housed in poorly performing schools. We examined the profiles of schools that housed SWSs to determine if any particular type of school was more likely to become involved in the small-schools movement. We examined a variety of school characteristics such as racial composition, academic performance, student mobility, and percentage of non-English-speaking students. At the elementary level, poorer-performing schools, measured by average years above or below grade level in math (see Table 3), and schools on academic probation were respectively significantly and marginally significantly more likely to host SWSs or divide themselves into multischools. For instance, a school whose students on average scored one grade level behind in math was 2.2 times more likely to possess a small school than a school whose students scored on average at grade level. The vast majority of the new SWSs were located in schools that served students of color. Only three of the 35 schools that housed small schools had 30 percent or more white students in their population. The racial composition of schools that contained small schools was very similar to the racial composition of the average CPS elementary schools. Freestanding elementary schools tended to serve lower-performing students from high-poverty backgrounds. On average, 92.1 percent of students attending the new elementary freestanding schools received free or reduced lunch. In contrast, on average, 86.5 percent of students attending conventional[3] elementary schools received free or reduced lunch.

At the high school level, a similar but slightly different pattern emerges. Predominantly African-American high schools and schools with higher student mobility rates were significantly more likely to house a SWS. Eight of the eleven schools that possessed SWSs served predominantly African-American students. Moreover, schools that hosted SWSs experienced higher levels of student mobility[4] than conventional high schools. The average mobility rates of host high schools and multischools were 35.6 percent and 42.2 percent, respectively, compared to 27.7 percent for conventional high schools. Although not significant, poorer-performing high schools were more likely to possess SWSs than higher-performing high schools[5]. For instance, a school whose students on average scored one grade level behind in math was one and a half times more likely to possess a SWS than a school whose students scored on average at grade level. High school SWSs largely served African-American students who attended poorly performing schools. At the system level, freestanding small schools and SWSs were predominantly created in poorly performing elementary and high schools that served students of color. This is in contrast to historically elementary schools, which were more likely to be academic magnets and tended to be located in less impoverished communities.

Students in small schools are among the most academically disadvantaged. At the system level, we wanted to know whether small schools educate students that are more academically prepared or less so than the average student in the system. At the elementary level, we compared the reading and math Iowa Test of Basic Skills (ITBS) scores of students in small schools with the scores of students attending other elementary schools. This comparison is problematic because differences between small schools and other elementary schools could be the result of small schools teaching their students more, or because of their students coming from a stronger educational backgrounds. In 1997, most small schools, however, had only recently started and were concentrating on creating their structure and identity. Therefore, we expected that small schools would experience little to no improvements in their students' level of achievement compared to other schools and that 1997 would provide a good baseline of student achievement. Analyses revealed that small-school students in general were scoring slightly lower on the ITBS exams than students in other CPS schools (see Table 5). Students attending SWSs were scoring approximately 0.03 grade equivalents[6] behind in math and 0.07 grade equivalents behind in reading, compared to students attending the conventional elementary schools. Moreover, freestanding small schools seemed to have recruited students from especially disadvantaged backgrounds. These students were more than 0.57 grade equivalents behind in reading, compared to students attending the average elementary school. The 1997 test scores indicate that small elementary schools, both freestanding and

SWSs, were working with low-achieving students who were performing below the average student in the system.

At the high school level, the academic preparation of students attending small schools could be directly compared to the academic preparation of students attending other high schools by examining high school students' eighth-grade test performance (see Table 6).

Similar to the elementary SWSs, high school SWSs educate students who are more than one-fourth a year behind the average high school in math and one-fifth a year behind the average high school in reading. In contrast to freestanding elementary schools, freestanding

Table 5: 1997 ITBS Performance

	Number of Schools	Math Achievement Grade Equivalents Above/ Below Grade Level	Reading Achievement Grade Equivalents Above/ Below Grade Level
SWS	32*	-0.50	-0.78
Multischool	49*	-0.56	-0.81
Rest of the System	389	-0.47	-0.71

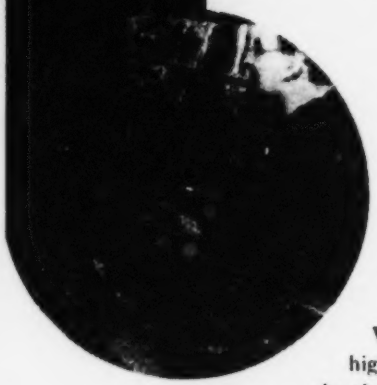
* Each SWS was counted as a unique school in this analysis. Five multischools were excluded from the analyses because they have no third through eighth graders.

Table 6: 1997 High School Eighth-Grade Reading and Math Achievement by Small-School Type

	Number of Schools	Math Achievement (Percent of Years Ahead or Behind Average School)*	Reading Achievement (Percent of Years Ahead or Behind Average School)*
SWS	22^	-27.0%	-19.7%
Multischool	27^	-44.0%	-29.0%
Freestanding	3	2.9%	5.4%

* Calculated by subtracting the average high school performance from the performance of the small school and dividing by the average amount of material eighth graders learned in 1997. Therefore, negative numbers mean that small school students are entering high school less academically prepared on average than students entering other CPS high schools.

^ Each SWSs was counted as a unique school in this analysis.



high schools are attracting students with slightly better educational backgrounds than the average high school.

With the exception of freestanding high schools, small schools at both the elementary and high school level are educating students who are performing below the average elementary and high school, respectively. Over-grade math preparation were substantial. SWS and host differences in eighth grade reading preparation were more modest and found in only three of the eight high schools hosting SWSs. Finally, we found that in the one high school that served a diverse student body, 40 percent Latino and 60 percent African-American, African-American students were more likely to enroll in SWSs than Latino students. Thus, high schools SWSs attracted stronger students than their host schools.

Table 7: 1997 and 1999 Demographic Differences Between Students Attending Host School and Students Attending SWS for 23 Elementary Schools

	Percent Special Education	Percent Female
1997 Average Difference*	2.2%	-4.0%
1999 Average Difference**	6.2%	-4.1%

* Note on Reading the Chart: Positive numbers indicate that the host school scores higher on the variable and a negative number indicates SWS score higher on the variables.

**Analysis for only 16 of 23 buildings that reported having SWSs in both 1997 and 1999.

whelmingly, small schools created in the 1990s are working to boost the achievement of lower-performing CPS students.

Some schools-within-schools were attracting slightly stronger high school students than their host schools. In buildings that contained both SWSs and traditional classrooms, we ran analyses to determine if different types of students attend SWSs. At the high school level, SWSs generally enroll significantly stronger math students, stronger reading students, fewer special education students, and more females than the host school. In five out of the eight high schools, the differences in SWS and host students' eighth

This phenomenon may partially be driven by student choice and the themes of the SWSs. This is especially true for schools that have math and science SWSs. We would expect these types of SWSs to attract stronger math students. When comparing the disparity across the eight high schools between the academic preparation of students entering the SWSs and those students entering the host schools, we discovered that SWSs located in high schools on academic probation were almost uniformly drawing more academically prepared students and fewer special education students. The extreme pressure on these schools to achieve may encourage students and teachers to sort students informally. The disparities between SWS students and host students tended to remain stable or grow larger between 1997 and 1999.

At the high school level, the academic preparation of students in SWSs could be directly compared to the preparation of students attending their respective host schools because many students took the ITBS in eighth grade. Unlike high schools, differences in the 1997 academic achievement of students attending elementary SWSs and host schools may be caused by two reasons. First, students may enter the SWSs with stronger academic skills than the average student in the host school. Second, SWSs may teach their students more than the host school and elevate their students' achievement above that of students in their host. Even in 1997, our fieldwork revealed that some SWSs were outperforming their hosts because of successful instructional strategies. Because we could not distinguish between these two explanations, analyses of sorting by academic achievement were not conducted at the elementary level. Elementary SWSs, however, did tend to attract fewer special education students and more female students than their host school (See Table 7).

The difference between the percentage of special education in SWSs versus their host schools was significantly greater in African-American schools and significantly less in elementary schools that served a predominantly minority student body. In general, students attending elementary SWSs more closely resembled students attending their host schools than at the high school level.

At both the elementary and high school level, significant differences between students attending SWSs and their respective host schools existed, we found that students' race, neighborhood, and distance from school did not affect their chances of enrolling in SWSs.

Small schools include fewer special-education students than the larger system. At both the elementary and high school level, SWSs enrolled significantly fewer special-education students than their respective host schools. The differences especially in 1999 were often very large. At the elementary level in 1997, on average only 8.8 percent of the SWS students were in special education, while almost 11.0 percent of the host-school students were labeled as special education. The difference at the high school level was of a similar magnitude, with 7.9 of the SWS students in special education compared to 14.6 of the host-school students. By 1999, this difference had slightly increased at the elementary level, with 8.2 percent of the SWS students in special education compared to 14.4 percent of the host school. At the high school level, the difference grew much larger, with 8.0 percent of the SWS students in special education compared to 27.6 percent of the host-school students.

Our fieldwork did not focus on the issue of special education so we are left to conjecture about possible explanations. It may have to do with the differential use of the special-education label in SWSs, the organizational structure of SWSs, CPS's promotional policies, and the problems encountered in recruiting special education students. For instance, the growth between 1997 and 1999 in the gap between special education students served by SWSs and the regular classrooms in their host school is partially attributed to the host schools' increasing use of the special-education label. With growing pressure to score well on standardized tests, elementary schools may be more likely to label their students as special-education. Inversely, schools may be identifying the needs of students better now that they are held more accountable for their performance. The stability of the percentage of special-education students in elementary SWSs in opposition to the trend in their host schools might indicate SWSs are more reluctant to label their students as special education. It may be that the ability of teachers in small schools to understand the strengths and weaknesses of their students may reduce the number of students in their school whom they label as special education.

At the high school level, a major reason that the number of special education students is increasing is that special-education students are exempt from CPS's eighth grade retention policy and are entering high school at higher rates than non-special education students.

The structure of SWSs may also produce barriers to recruiting special-education students. Schools-within-schools are often organized by a group of like-minded teachers around a certain theme or instructional approach. Schools-within-schools that do not contain their own special-education teacher may have trouble integrating special-education resources into their SWSs, which may lead the school to admit fewer special-education students. Lastly, SWSs may have a difficult time recruiting special-education students. The vast majority of SWSs recruit their students by advertising their theme and focus to students and parents in the host schools. Special-education students may be hard to recruit because they may believe that their special-education status could preclude them from joining the SWS or any other program in the school.

Small-schools teachers are neither better educated nor more experienced than their colleagues in the larger system. Overall, elementary and high school small school teachers had similar educational backgrounds and teaching experiences as other CPS teachers, but, two interesting trends emerged. Teachers in high school SWSs tended to be less likely than other CPS high school teachers to have taught outside CPS. Teachers in elementary SWSs and in small freestanding elementary schools, however, tended to have a stronger educational background, have a higher degree or come from an academically stronger college, than other CPS elementary teachers. Small elementary schools were either started by or attracted teachers with stronger academic backgrounds.

"The attendance is very high. I have kids here early. They arrive at 7:45 and then ask me why I'm late." (Small-school teacher)

When examining a range of indicators to assess student achievement, the data from 1997 to 1999 suggest that students in small schools:

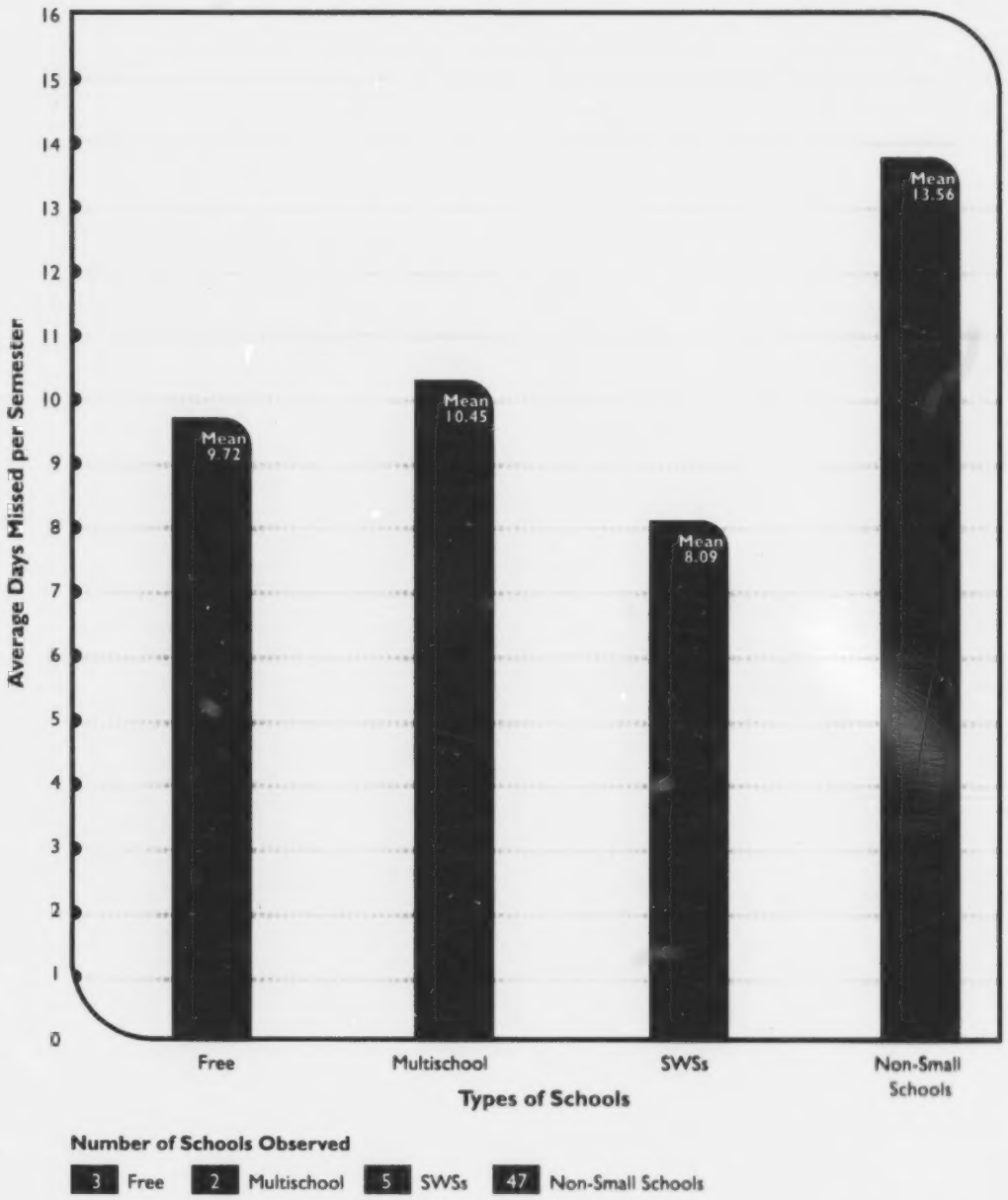
- have better attendance rates;
- have significantly lower dropout rates;
- have higher GPAs;
- fail fewer courses;
- have stronger achievement test scores, given that more students are taking the tests and the scores have not dropped; and that
- elementary SWSs are significantly less likely to have students repeat a grade than their host schools.

Our primary interest was to investigate the link between student achievement and school size. We broadly defined student achievement as consisting of three parts: student attachment, student persistence, and student performance. In order to improve student performance, a school has to first engage its students. At the high school level, Chicago is troubled by high rates of student absenteeism, class cutting, and truancy (Roderick et al. 1997). On average, high school students in 1999 missed per semester almost 13.4 days in their core academic classes; English, science, mathematics, and social studies. Because absenteeism at the high school level often emerges from feelings of anonymity and lack of accountability, we expected that the closer relationships and sense of being known facilitated by smaller school environments would significantly decrease students' absenteeism soon after the small school was opened.

Findings: The relationship between school size and student achievement suggests that students' attachment, persistence, and performance are all stronger in the small schools as compared to the system at large.

Chicago high schools also suffer from high dropout rates. Tracking the students who entered high school in 1994 over a five-year period, we found the overall dropout rate was 40.5 percent.[7] One factor contributing to the high dropout rate is the high rate of course failure; more than 40 percent of students fail two or more of their core academic courses during an academic

Figure 3: 1999 Average Days Missed in Core Courses Per Semester Controlling for Eighth Grade Achievement and Demographics



year. Students may be coming to school, but they also need to be actively engaged in school, as indicated by passing their courses and accumulating credit in order to graduate. An important goal of Chicago's reform is to lower its high dropout rate by engaging students in their academic coursework. We examined whether small-school environments aid and press students to finish school at higher rates.

Chicago is leading the nation in its effort to end social promotion. Third-, sixth-, and eighth-graders are required to score above a cutoff on a standardized test of basic skills, the Iowa Test of Basic Skills (ITBS), in order to be promoted to the next grade. With the aid of a greatly expanded summer school program, a substantial number of students are making the test cutoff. However, a significant number of students are being retained. In both 1997 and 1998, CPS retained 20% of the eligible third graders and approximately 10% of the sixth- and eighth-grade students. In 1998, 1600 students were retained for the second time (Roderick, Bryk, Jacob, Easton and Allensworth, 2000). The better ability of teachers in small schools to get to know the weaknesses and strengths of their students and collaboratively work together on curriculum may enable small-school staff to respond more effectively to Chicago's retention policy.

Students' grade point averages (GPA) and performance on standardized tests were the final indicators used to assess the effectiveness of the small-schools movement. We analyzed GPAs because they help to determine the college options available to students. Moreover, GPAs provide a measure of school performance while the standardized tests provide a general measure of skills and knowledge.

These three indicators—school engagement, school persistence, and academic achievement—were used because no single indicator can tell the whole story and because some indicators are more difficult to achieve than others. We expected to see evidence of increased student engagement and persistence quickly, facilitated by better relationships between and among teachers and students. We believe the relationship between smaller size and improved achievement, however, is more complex, because it depends on a greater number of variables. Smaller size and better-quality instruction are both necessary, and these take time to come to fruition in new settings.

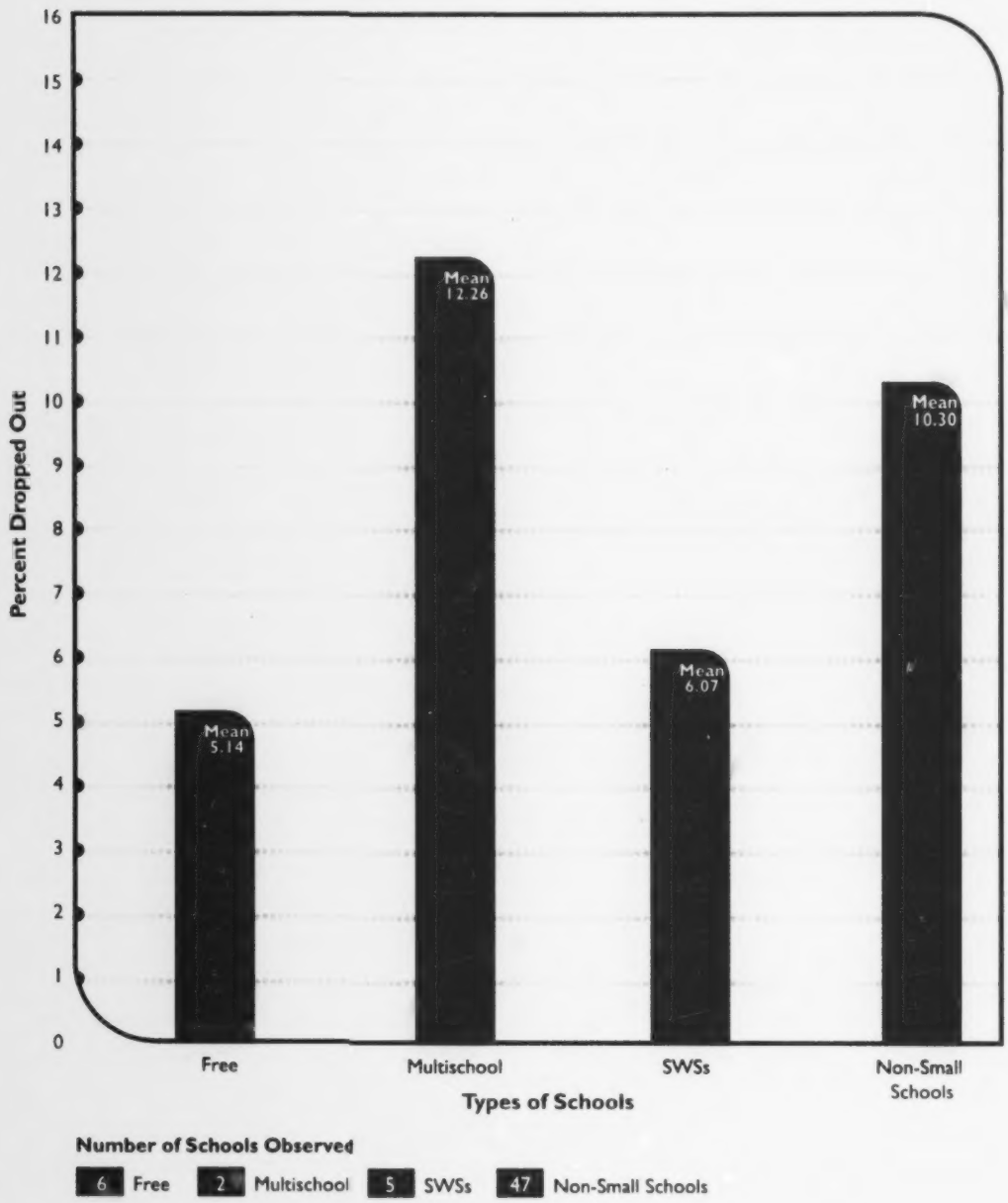
Attendance rates at the high school level were higher than the system average in small schools. Attendance rates were calculated by averaging student absences across their core academic courses, English, math, science, and social studies. If the student left the system or dropped out, only the fall-semester information was used. If the student persisted the full year, student absences from the fall and spring semesters were averaged. An average of class absences was used to take into account the extensive class cutting that exists at the high school level. The new small high schools in Chicago showed higher attendance rates than other Chicago schools. Both in 1997 and 1999, students in small high schools attended school more often than students attending the host schools and the average school in the system.

For instance, students attending small schools on average attended almost four or five more days of school per semester than students attending the average high school, after controlling for demographic differences (see Figure 3). One teacher comments,

> *"When I was at [another school] teaching a class, I'd have 28 kids on my roster; maybe 15 would actually show up on any day, and maybe ten or five would turn in homework. Here, out of my roster of 28, I have 27 showing up and 26 turn in the assignment."*

Other high school teachers expressed that they couldn't return to teaching in a large school because they had become accustomed to their students showing up to school. Although the small schools have made progress in getting students to come to school, their students are still missing almost two weeks, or eight to ten days, of school per semester. Small schools have just begun to lower the high levels of absenteeism and truancy.[3]

Figure 4: 1999 High School Dropout Rates Controlling for Eighth Grade Achievement and Demographics.



The dropout rate was significantly reduced in both freestanding schools and schools-within-schools at the high school level. We analyzed the one-year dropout rates of high school students. Students who left the system to attend another school were excluded from the analysis. On average, between September 1998 and September 1999, 11.1 percent of SWS students and 8.4 percent of freestanding students dropped out of school. In comparison, 19.8 percent of host-school students and 10.8 percent of students attending other CPS schools dropped out. The SWS dropout rate was almost half that of the average host school. Even after controlling for demographic differences, the predicted dropout rates for SWSs were significantly lower than those of their host schools by five percent and the rest of the system by approximately four percent (see Figure 4 for adjusted dropout rates)[9].

Small schools were able to reduce their student dropout rates even in their first few years. Eight new high schools opened SWSs after the 1996-1997 school year. Open for only one or two years, these SWSs showed a significantly lower average dropout rate (4.8 percent) than their host schools (12.9 percent) or the system (10.8 percent). This pattern of results persisted even when controlling for students' eighth-grade achievement, students' demographic profile, and school composition.

Multischool students dropped out at the highest rate, 16.8 percent. Even after controlling for demographic differences, the dropout rates at the two multischools either equaled or exceeded the system average.

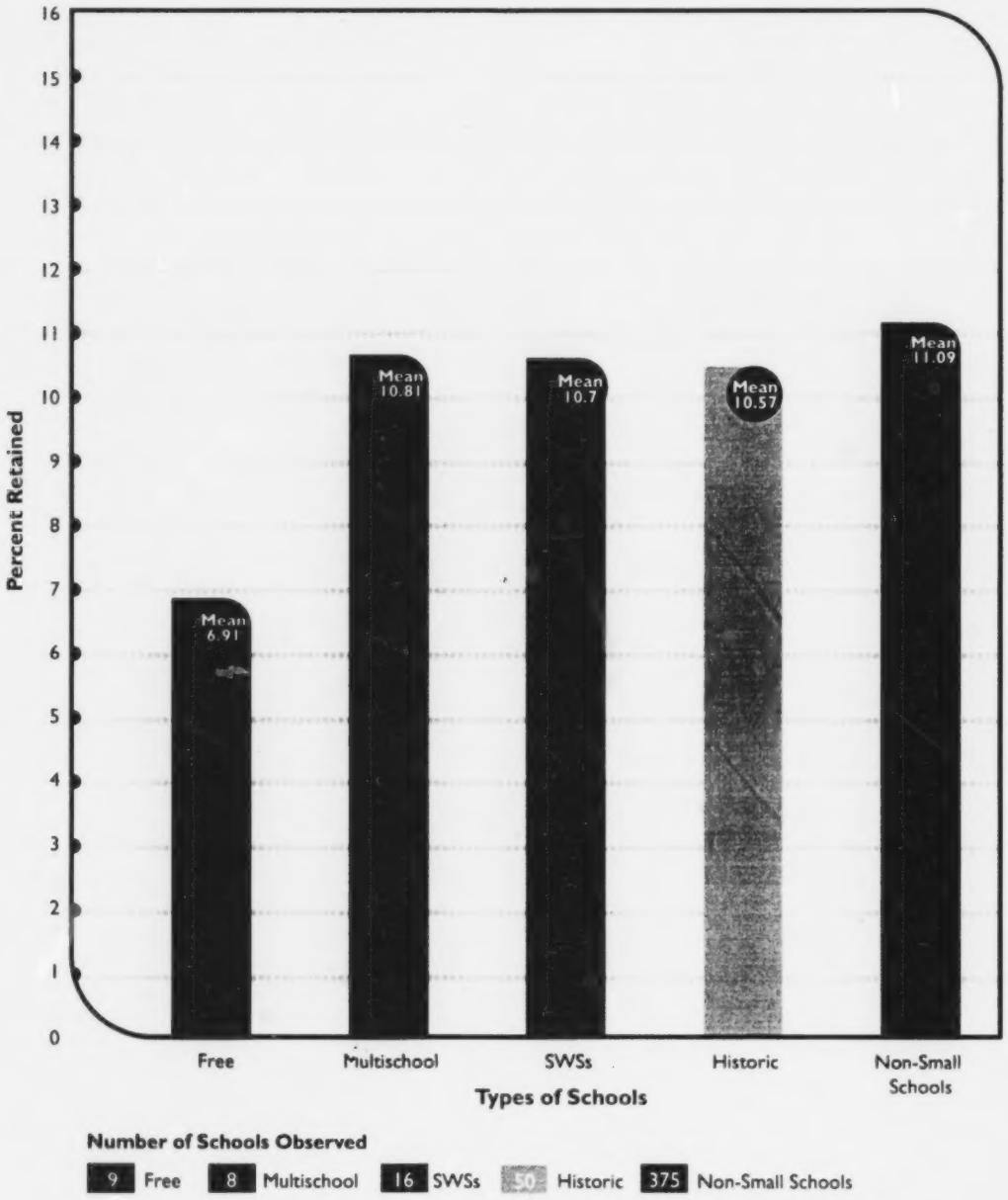
Course failure rates are reduced in schools-within-schools. Students who fail their courses—specifically core courses such as English, math, science, social studies, and history—are more likely to drop out of school. We analyzed what percent of high school students failed two or more of their core courses during the 1999 academic year.[10] Using this criterion, students attending SWSs tended to fail much less often (40.9 percent) than students attending their hosts (54.8 percent) and students at freestanding schools tended to fail at about the same rate as students attending other high schools (40.1 percent versus 40.6 percent)[11]. Although the difference in the failure rates of students attending SWSs and their host shrinks and becomes nonsignificant when demographic characteristics of the students and schools are controlled, SWS students still fail substantially less often, 36.3 percent, than students attending their host schools, 41.4 percent.

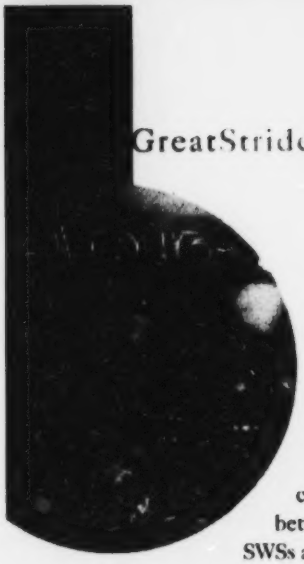
Small schools have just begun to erode high course-failure rates in high school. The ability of small schools to decrease their dropout rates while improving course failure rates suggests that small-school teachers help press and guide students through courses instead of allowing course failure to push students out of schools. In our visits to the high school, some students remarked that the support of their student peers, coupled with the unrelenting pressure of teachers, was critical in keeping them in school and graduating.

Retention rates were reduced in the new small schools.[12] An important task of elementary schools is to help their low-achieving third-, sixth-, and eighth-grade students to score high enough on the ITBS to advance into the next grade. Students attending SWSs in 1999 were retained at substantially lower rates than students attending their host schools: 16.9 percent versus 26.3 percent. Even after controlling for student achievement, we found that SWSs had significantly lower retention rates than their host schools, 10.7 percent versus 13.1 percent. Although on average SWSs retained fewer students than the average elementary school after controlling for demographic and performance differences, these results were not significant. Freestanding small schools, however, retained significantly fewer students than other elementary schools even after controlling for demographic differences: 6.9 percent versus 11.1 percent (see Figure 5). Over time, SWSs are experiencing more success with low-achieving students. These schools are helping them to reach CPS promotion standards at higher rates than their host schools and in some cases the conventional schools. In 1997, the retention rates of SWSs were not significantly different from their host.

High school students in small schools achieved significantly higher grade point averages. High school students attending SWSs achieved significantly higher GPAs than students attending their host schools.

Figure 5: 1999 Third, Sixth, and Eighth Grade Retention Rates Controlling for Level of Achievement, Grade Structure, and Demographics





High school students attending SWSs had marginally better GPAs than students attending other elementary schools even after controlling for demographic differences between schools. Students attending SWSs are attaining better grades than their counterparts (see Table 8).

the students take (see Roderick et al., p. 5, for more in-depth discussion). Beyond that issue, the multiple-choice questions do not provide complex, multi-step tasks that require students to show their problem-solving or writing abilities. One of the central flaws of these tests is that they encourage teachers to spend time preparing students for a test that does not measure the kinds of higher standards the system says it is seeking. Despite the problems with standardized-test

Table 8: 1999 High School Grade Point Averages Controlling for Student and School Demographic Characteristics

Type of School	Predicted GPA GPA is on a zero-to-four scale (1 = D and 4 = A)
Freestanding schools versus average high schools	1.98 versus 1.96^
SWSs versus average high schools	2.11 versus 1.96^
SWSs versus host schools	2.11 versus 1.89

^ Average for 47 high schools that are not small and do not contain any SWSs

Small schools improved their reading and math scores between 1997 and 1999 and tended to outperform their hosts in reading and showed mixed results in math.

In the past, standardized-tests scores in Chicago drew local and national attention for their extremely low achievement levels. More recently, test scores have been used to demonstrate that certain levels of achievement are unacceptable, and to promote higher levels of achievement for all students regardless of background. The standardized tests, which are central to Chicago's accountability system, are problematic. The system currently employs several different forms of the ITBS that it administers at different times.

Some of these forms are more difficult than others. This means that the promotional standard may be easier or harder to meet, depending on the test form

scores as a measure of student achievement, we chose to analyze the scores because these are the measures with which policymakers and parents are most familiar.

In 1997, at baseline, small elementary and high schools did not perform significantly differently from either their host schools or the system at large on standardized tests. These results were not surprising, because the small schools were new and needed to operate a few years before they had a significant impact on students' achievement levels. It is important to remember that the small high schools were losing fewer students than other high schools. Therefore, if small high schools maintained their test scores at levels equal to the host and the system, this was an accomplishment, because they were keeping students who would have dropped out if they'd attended other CPS schools (see previous section on dropouts).

1999 Achievement
This portion of the report assesses small schools' performance on the reading and math sections of Chicago's standardized tests in 1999. These analyses focus on reading and math performance because these subjects measure critical skills students need in order to be successful and reflects what CPS uses to evaluate schools and students.

Prior to discussing the findings, it is important to contextualize them by briefly reviewing the general improvement CPS schools recorded. Between 1997 and 1999, Chicago's test scores significantly improved in both reading and math. For instance, the reading scores in 1997 revealed that 30.3 percent of elementary students and 24.4 percent of high school students scored at or above national norms. By 1999, those numbers had jumped to 35.9 percent of elementary students and 32.2 percent of high school student scoring at or above national norms in reading. Large improvements were also realized in math scores during this same period. Therefore there are three ways to look at student achievement: 1) to assess how small schools test scores change over time; 2) to compare the small schools to their hosts while controlling for demographic differences; 3) to measure how much students are learning in small schools compared to their hosts and the system.

The achievement trends for high school and elementary small schools were different and therefore are presented separately below.

High School.

- In 1999, students attending high school SWSs were performing at higher levels and learning more reading and math than students attending their host schools. Moreover, SWSs students were learning nearly the same amount of math and slightly more reading on average than students attending other CPS high schools.
- In 1999, students attending freestanding schools were achieving at higher levels and learning more reading than students attending other CPS high schools. Math performance was slightly behind.

1997-1999 Trend in Small Schools Performance. High school SWSs' math and reading scores substantially improved between 1997 and 1999. In 1997, the average SWS qualified or almost qualified for academic probation because only 10.8 percent and 15.4 percent of its students were scoring at or above national norms in reading and math, respectively. By 1999, SWSs had made substantial gains. In addition to elevating the number of student scoring at or above national norms to 17.5 percent in reading and 21.8 percent in math, SWSs' average students were scoring .46 grade equivalents higher in reading and .15 grade equivalents higher in math. Multischools made similar achievement gains between 1997 and 1999. SWSs and multischools were making impressive achievement gains in some of Chicago's lowest performing high schools. These gains, however, need to be interpreted cautiously because they are partially attributable to CPSs' new policy of retaining low performing eighth graders.

In contrast to the SWSs, on average the freestanding high school level of achievement remained flat in reading and actually slightly decreased in math (see Table 10 for math scores).

1999 Achievement Controlling for Demographic Differences. SWSs were compared to their host schools in order to determine if the SWS strategy provided the host school an effective method to elevate the academic performance of its students. On average, SWSs outperformed their host schools by .26 grade equivalents in reading and .09 grade equivalents in math. Although not significant, students in SWSs tended to outperform their counterparts attending their host schools especially in reading. This suggests that SWSs are effectively raising the overall achievement of the buildings that host them.

It is also important to compare SWSs and freestanding schools against other CPS high schools. Freestanding high schools were able to elevate their reading scores above the system by an average .29 grade equivalents and were performing on par with other high schools in math (see Table 9 and Table 13).

Although SWSs outperformed their host schools, SWSs performed significantly worse in both reading and math by .78 grade equivalents and .87 grade equivalents, respectively, than other high schools (see Table 9 and Table 13). We look to academic growth to help us explain this.

Academic Growth in 1999. At the high school level, growth was measured by controlling for students' eighth grade achievement. Therefore, this analysis measured on average how much students learned while they were in high school.

Students attending high school SWSs were learning significantly more reading than students attending their host school, a difference of about .10 grade equivalents. In math, students in high school SWSs learned .15 grade equivalents more than students in their host school. In two of the five high schools in reading and four of the five high schools in math, students in SWSs were learning more material than their counterparts in the host school (see Table 12 for Math Results). SWSs seemed to be effective as a school strategy to raise the learning rates of its students. Remarkably, SWSs were able to hold onto more students (i.e., they had a lower dropout rate) and also teach their students more materials than their host schools.

Moreover, students in SWSs were actually learning on average .05 grade equivalents more reading than students attending other CPS high schools. Located in poorer performing schools, SWSs were beginning to slowly close the gap between their students and those attending other CPS high schools. In math, however, SWSs average growth rates still remained .04 grade equivalents behind that of the average CPS high schools. Integrating the growth and achievement results for high school SWSs suggests that SWSs are substantially scoring below the system average on absolute measures of achievement because they educate students with weaker eighth grade academic backgrounds (see Table 9 and Table 13).

Table 9: Difference Between Small Schools and Average CPS Schools on 1999 Reading Achievement, Reported in Grade Equivalents

Type of School	Elementary School Reading Achievement	High School Reading Achievement	Elementary School One-Year Growth Measures (Measured % of One-Year Growth)	High School Achievement (Controlling for Eighth Grade Achievement)
Average of Freestanding	0.07	0.29	-4.9%	0.06
Average SWSs	-0.08	-0.78•	-9.4%#	0.05
Multischools••	-0.11#	N/A	-2.4%	N/A

#p< 0.05 •p<0.01

••Only 2 high school multischools existed, they were analyzed as case studies and means were not computed. The elementary multischools were analyzed separately from the SWSs and freestanding schools because they often were built around grade levels instead of school theme and they involved the whole school.

Similar to SWSs, freestanding high schools were teaching their students slightly more reading, .06 grade equivalents, than other high schools. Freestanding schools' growth rates suggest they are expanding the gap between themselves and other high schools on measures of standardized achievement. In contrast, students at freestanding schools on average are learning substantially less math, more than two months or .21 grade equivalents, than students attending other CPS high schools (see Table 9 and Table 13). Although successful in reading, freestanding high schools are having difficulty teaching their students in math. After the elementary section, we will discuss possible explanations for this finding.

Elementary Schools.
The small schools at the elementary schools are improving but the data is more complex and mixed. It may take more time to see the achievement effects.

- Small elementary schools consistently and, at times, substantially elevated their achievement scores in math and reading between 1997 and 1999.
- Although SWSs outperformed their host schools in reading and math, SWS students learned approximately the same amount of math and reading material as students in their host school during the 1999 school year.
- When comparing small freestanding schools' students with the larger system they learned less.

1997-1999 Trend in Small Schools Performance.
Small elementary schools consistently elevated their scores between 1997 and 1999 in both reading and math. For instance, on average, the percent of students at or above national norms in reading grew from 27.1 percent to 33.0 percent in SWSs, 22.5 percent to 25.6 percent in multischools, and 20.1 percent to 28.2

Table 10: 1997 and 1999 TAP Performance on Math*

Year	SWS	Multischools	Freestanding	Rest of System~
1997 Number	**14**	**10**	**3**	**49**
1997 Grade Equivalents Behind Grade Level in Math	-2.15	-2.46	-1.24	-1.62
1997 Percent of Students At/Above National Norms	15.4%	15.67%	23.6%	23.6%
1999 Number	**14**	**10**	**3**	**47~**
1999 Grade Equivalents Behind Grade Level in Math	-2.00	-1.76	-1.76	-0.59
1999 Percent of Students At/Above National Norms	21.8%	25.9%	19.0%	37.1%

* Small schools that closed and opened between 1997 and 1999 were excluded from the table.
~ Number of schools is less because a number of high schools opened SWSs between 1998 and 1999. These schools were excluded from this analysis.

Table 11: 1997 and 1999 ITBS Performance on Math*

Year	SWS	Multischools	Freestanding	Historically Small Schools	Rest of System
1997 Number	**19**	**26**	**4**	**41**	**388**
1997 Grade Equivalents Behind Grade Level in Math	-0.59	-0.71	-1.04	0.10	-0.47
1997 Percent of Students At/Above National Norms	30.9%	28.0%	16.7%	53.0%	35.2%
1999 Number	**19**	**26**	**4**	**41**	**365~**
1999 Grade Equivalents Behind Grade Level in Math	-0.43	-0.46	-0.54	0.35	-0.19
1999 Percent of Students At/Above National Norms	38.8%	35.0%	30.3%	62.4%	44.3%

* Following CPS reporting procedures, we only report the test scores of 3rd through 8th graders. Small schools that closed and opened between 1997 and 1999 were excluded from the table

~ Number of schools is less because a number of new elementary schools opened SWSs between 1998 and 1999. These schools were excluded from this analysis.

percent in freestanding schools. Larger gains were made in math (see Table 11). Small elementary schools consistently improved their test scores between 1997 and 1999.

1999 Achievement Controlling for Demographic Differences. As with the high schools, the level of achievement of small elementary schools was contrasted against the academic performance of their host schools and other CPS elementary schools. Elementary SWSs outperformed their hosts by .12 grade equivalents in reading and .06 grade equivalents in math. These differences, however, were not significant. Even though these differences are less than observed at the high school level, elementary SWSs were on average performing better than their host schools.

Comparisons of small elementary schools to the rest of the system, however, found that small schools tended to score approximately one to one-and-a-half months behind other elementary schools in both math and reading (see Table 9 and Table 13). The differences between small elementary schools tended to be greater in math than in reading and in some cases were statistically significant. Since elementary schools registered large improvements in their test scores between 1997 and 1999, the tendency for the elementary small schools to perform at lower levels than the rest of the system may be attributable to their being founded in poorer performing elementary schools. By examining academic growth rates in the next section, we can determine if small schools are closing the achievement gap.

There was one exception to this trend. Freestanding small schools on average performed .07 grade equivalents better than other CPS elementary schools in reading.

Academic Growth in 1999. Analyses of academic growth found that students attending elementary SWSs learned approximately the same amount of reading and math between 1998 and 1999 as students attending their host schools. The average reading growth of elementary SWS students was only 2 percent greater than the growth

Table 12: Math Performance, SWSs Versus Their Hosts

	School 2	School 3	School 4	School 5	School 7
Average of SWSs Achievement in Math	-0.59	-0.77	-0.32	-0.82	-0.35
Host School Achievement in Math	-0.99	-0.47	-0.71	-1.03	-0.64
Difference in Achievement between Average SWSs and Host School	0.40	-0.30	0.39	0.20	0.29

Table 13: Difference Between Small Schools and Average CPS School on 1999 Math Achievement, Reported in Grade Equivalents

Type of School	Elementary Schools Math Achievement	High School Math Achievement	Elementary School One-Year Growth Measures (Measured % of One-Year Growth)	High School Achievement (Controlling for Eighth Grade Achievement)
Average of Freestanding	-0.16+	-0.05	-13.4%#	-0.21
Average SWSs	-0.13+	-0.87#	-13.8#	-0.04
Multischools**	-0.10	N/A	-7.6%	N/A

+p <0.10 #p<0.05 *p<0.01

** Only two high school multischools existed, so we examined only these schools' residuals, and no mean effect was computed. The elementary multischools were analyzed separately from the SWSs and freestanding schools because they often were built around grade levels instead of school theme and they involved the whole school.

experienced by students in their respective host schools. Although SWSs were in general outperforming their host schools in reading and math, SWS students learned approximately the same amount of reading and math material as students in their host school during the 1999 school year.

Especially in math, small school students learned less on average than students attending other elementary schools (See Table 9 and Table 13). In reading, students attending freestanding schools and multi-schools learned slightly less than students attending other CPS schools. Students attending SWSs, however, learned significantly less reading than other CPS students, almost one-tenth of an academic year's growth. Moreover, students attending freestanding elementary schools and SWSs learned approximately 13 percent of an academic years growth less than students attending other elementary schools. Students attending elementary small schools were learning less reading and math on average than students attending other elementary schools.

Discussion of Academic Findings

The challenge to elementary and high school SWSs is to elevate their performance to levels at or above the system. We see the same obstacles facing elementary and high schools: the need for more professional support, for more academic rigor, and for SWSs to compare themselves to high achieving schools in addition to their hosts.

Small high schools have made important strides. High school SWSs are outperforming their host schools in both reading and math and even other high schools on measures of reading growth. Freestanding schools are outperforming the system in reading. It is impressive that small high schools are simultaneously improving reading scores while achieving dropout rates significantly lower than the system average. Small schools are engaging more students and teaching them more reading at the high school level. Small high schools math performance, however, still lags behind the systems and presents an important challenge.

Established in poorly performing schools, elementary small schools have made important improvements in their test scores between 1997 and 1999. Even with these improvements, however, small elementary schools are performing below the average school in the system. Because CPS elementary schools are substantially improving in general, it may take the elementary small schools more time to build an effective instructional program to compete effectively with other elementary schools. The ability of elementary SWSs to help poorly performing third-, sixth-, and eighth-grade students meet CPS promotional requirements indicates the ability of small elementary schools to deliver improved achievement results.

Overall, small schools achieved more in reading than math. In our fieldwork, we found that many schoolwide efforts, both for the host schools and the SWSs, concentrated on reading initiatives. In fact, several small school math teachers specifically found fault with some professional development strategies that did not incorporate math. Many faculty members suggested that in these early stages of development, they were focusing on improving reading instruction, and had built schoolwide plans for teachers and for students to improve reading skills and scores. Given the enormity of the children's needs in reading and the complexity of improving them, they had not yet begun to concentrate on math, but we are hopeful that they will be able to find the resources to do so. There was concern at both the elementary and secondary level that teachers needed support in building their own math skills and instructional approaches in both reading and math in order to be able to reach all the students they encountered.

There is a lively debate within the small schools about whether they should be preparing students to take the test. Many feel that students need to concentrate on building skills—like reading—first and that this is a top priority. Without confidence in that skill, test prepara-

tion in itself is quite difficult. One of the schools that showed the greatest gains on test scores suggested that they had learned how to "integrate test prep into the curriculum."

Further, teachers stated repeatedly that they were seeing gains that neither we nor the city assessment system measured. Many are keeping track of grade-level gains, improved levels of responsibility, growth in emotional maturity, and critical thinking. The teachers suggested that growth in these areas should eventually improve overall test performance.

Small schools have made important gains in those areas in which change can be documented quickly: attendance rates, dropout rates, and so forth. Improvement on these indicators means that more children are taking the tests—a gain in itself. It takes more time to see growth in standardized-test scores, and these should be examined over the next three or four years. Given that, nationally, the Hispanic dropout rate is the highest in the country and that the African-American dropout rate is second, the fact that these schools are serving these two groups is an important finding. Keeping these students in school dramatically increases their chances of success.

Findings: A number of conditions affect student achievement including a heightened sense of safety, greater variety in instructional approaches, and stronger accountability between teachers, students, and parents.

We visit several teachers who have agreed to meet with us as a group to talk about both the challenges and the benefits of small schools. They are working with children in a bilingual setting, hoping to strengthen the students' facility in English while also protecting and valuing their native language, which is Spanish. The hallway is colorful—done in a Diego Rivera-esque mural that the children designed and painted with an artist who came to them from their external partner, a local cultural institution. We ask, what do you do that allows you to help the kids?

M: Four of us work as a cluster to provide support to the students. If someone needs more monolingual support, we can break one teacher out to work with those students. We have a great deal more flexibility here because we can change our class schedule. And we only have 250 kids in the whole school—that makes a difference too!

T: One of the best projects we did was a collaborative mural with high school students from a neighboring African-American high school. We wanted to do that because our kids are Hispanic and they need the opportunity to get to know kids from different races. If we'd been a big school, we never could have collaborated—but we could flex our schedule and share the teaching artist. It was great for our kids—it pushed their English and helped them understand and get to know kids from a different identity group.

A: We spend more time thinking about how to get the kids up to speed. Last week we spent the whole week at lunch on a kid that had acted up and could have been suspended. All week we kept asking, 'So what will the gains be if we suspend him? Isn't there another way to give him the message about what he might do to accept the consequences of what he has done.' In the long run, we decided to keep him here and to share responsibility for working with him so that he wouldn't lose the gains he'd made in school. That's what happens when we suspend kids, you know. They just lose whatever progress they've made.

E: We are always trying to figure out whether the work we are giving them is rigorous enough. I've been to New York twice to visit small schools there, and I always see very caring teachers, but I'm not always sure that the rigor is there. If teachers really care about kids, it goes way beyond touchy-feely kinds of experiences. We want kids to be engaged and to work hard.

SD: And when we hire teachers we have to think about this. There are a lot of teachers in this school system who have really stopped caring about kids or asking them to work hard. They just report for work, collect a check. We try to set up our interviews so that we can both find out and

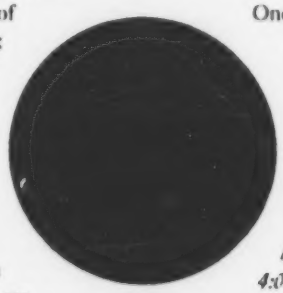
communicate our own values about caring and rigor. We want to see something meaty in what they give kids. We push to find out whether they know how important it is to get kids working in small groups. And we want to know whether they understand how important it is for them to write in every subject.

A: There are hard things about being in a small school too. Like when we argue. We are like a family—with each other all the time. So, it is hard to argue productively. We need skills in open-discussion techniques. We are so close, I sometimes think we worry too much about being polite to one another.

T: We really think staff development is important for everyone so that we can keep growing. And we do try to work on it. But finding the time is a problem. We thought we would have half days because of our internship program, but here it turns out that we have to go with the kids, so there goes that time. We need time to meet with artists that we have access to and time to plan the big projects that we've been doing. Those sort of come in spurts—because we have to be able to give big chunks of time.

SD: One of the other problems is that because we care more about doing things like projects together, we don't have the time to get very clear about things like a discipline plan. That's what happens when you are new—you have to create everything! Right now, we all have our own plan because we simply haven't had time to build one together.

Repeatedly, teachers and principals in small schools suggested that their smallness in and of itself was not sufficient for improving student achievement. They stressed that it was a combination of factors that were facilitated when the size of the school was small enough so that the adults could work together more easily. Consistent with nationwide findings, our research found that small schools create communities where students are known, encouraged, and supported. Students are aware of their value in these communities and, as a result, are more inclined to be responsive to teachers and responsible as students.



Engaging small school students. Given the kinds of gains in attendance, promotion, and course-completion rates, and the decrease in dropout rates, we wanted to see what conditions were in place inside the small schools that made these gains possible. We identified conditions that affected students, parents, and teachers, and found the following to be true:

- Teachers know students well.
- Teachers have high expectations for the students, which often leads to high expectations in the students themselves.
- Teachers foster critical judgment in their students.
- Teachers use a broad range of strategies to engage their students.
- Students report feeling safer in their schools.
- Accountability is strengthened between parents, students, and teachers.

Teachers know students well. "In this school, you can put a face with the name. Our teachers know all of us," said Fatima. "We have to show up here or the teachers will call your parents. They are on a first-name basis with our parents and they care that we come and that we get it," confirmed Alex. In small schools, students' relationships with parents, teachers, administrators, and partner organizations are crucial. The small schools were able to develop concrete identities, supported by a substantial and enduring sense of community, and these were characteristics that meant a lot to the kids.

One staff member states:

"Kids stay after school and don't want to go home and we can't get them to leave, and it's because of this sense of family and belonging."

And at another school, a teacher comments:

"We have a morning program. Starts at 7:30. There's also an afternoon lighthouse program. We have kids who are in both. They're here from 7:30 to 4:00 pm. And they would stay longer...they want to be here. That's what school should be."

Teachers have high expectations for the students, which often leads to high expectations in the students themselves.

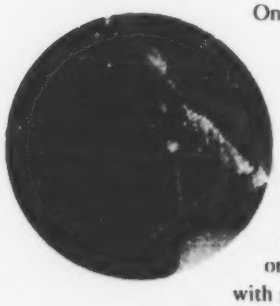
"Our teachers are all focused on our going to college and stuff. They have it all set up so that we will have a portfolio when we finish here to help us get in."

Close relationships between adults and youth raise expectations.

One staff member described the process as follows:

"Since you become so close to kids, it's important to them that they meet our expectations. They know very well how much we want them to succeed. The kids want to please you."

Heightened expectations are manifested through the care and academic aspirations teachers have for their students.



One administrator states:

"[Our] biggest challenge is getting the students to believe that they can do it instead of lowering the bar."

High expectations require relationships and communities of support; only in caring relationships and with support can expectations become internalized and, potentially, realized.

Teachers foster critical judgment in their students. An elementary student put it well:

"We learn critical thinking—we use our brain, not everyone else's."

One principal explained:

"The staff has had to learn to deal with kids who question what they do because they are fostering independent thinkers."

In the strongest small schools, faculty members are expanding academic horizons and equipping youth with the skills of critical analysis and inquiry.

Teachers use a broader range of strategies in order to engage students.

"One of our teachers has been doing a study about how we learn with a university professor. Together, they decided that we should change the order of our classes and the way we learn so that it will stick better."

Teachers in small schools use a broader repertoire of approaches for conveying content and for engaging their students. At one school, the lead teacher detailed how this works:

"Students don't usually get a chance to hear other people think. In math and science, the students are asked to solve problems and explain to the class how they solved the problems. In English, they have literature circles where they help each other read and provide explanations of what they are reading. A role sheet is given and students assume different roles: discussion director, creative connector (connect the story to something else), word wizard (looks up the hard words), illuminator (looks up and determines the importance of passages), travel chaser (tracks the journey), and artist (visual representation)."

In so doing, students are acquiring a variety of skills, learning how to be constructive and productive community members.

In addition to, and probably as a result of, forming strong and purposeful bonds in their schools, many small-school students become involved with projects that help them to learn about their neighborhoods. In many small schools there was a community-service requirement above and beyond CPS requirements. The students were involved in diverse community projects such as recycling, participating in the Chicago AIDS walk, helping to build a home for elderly women, painting Chicago Transit Authority murals, and attending vocational workshops.

Students feel safer in their schools because they are learning the skills of conflict management and democratic citizenship.

"You can't walk through the halls here looking mad, because a teacher will stop you to find out what is going on, and you can't just bluff your way by."

"We have peer mediation here, and in all three grades people have been trained. If you have a problem you write down the problem, and that indicates that you want to solve it by talking it out. Students mediate the problem. No adults. It's better because kids are less judgmental than adults. We stop violence before it erupts."

Students were highly engaged in their small schools and felt a responsibility toward their school akin to citizenship. The high level of student involvement in the small schools, coupled with their sense of community, helped keep the students interested and involved in their schools.

Focus groups with students revealed that they choose to attend and remain in small schools because these schools make them feel comfortable and safe. They are less likely to engage in violent physical altercations.

"We can teach values, ethics, [and] conflict-resolution strategies in small doses. It's contagious. Brian, who came in violent, unmotivated and uninterested—and later, in a potentially violent situation, Brian said of another student, 'I can tell he has hurt feelings. Can I talk to him?'"(Charter director).

A number of small schools indicated that they work hard on the skills of ethical citizenship, nonviolence and community participation. The story of Brian, above, was echoed by a teacher from a school-within-a-school, who told a story about a student named David.

"At first he would be the first one to cheer a fight. Now, recently, when he was witnessing a fight, he didn't stand there and cheer them on. He was the one who got the kid who didn't want to calm down out into the hallway and had him waiting there for Ms. — ."

In another high school, the teacher explained that the students were mean to one another and constantly harassed one another when they first came into the school. By their senior year, two years later, these students had built trusting relationships and spoke about the school as if it were a family.

Small schools deal with many of the disciplinary problems in a manner that larger schools cannot. They suggest alternate ways for the kids to deal with anger and think about preferable solutions. They attend to problems earlier, involving teachers and parents more quickly, and attempt to help students understand and modify problematic behaviors. Through community, personal relationships, and expectations of civility, students begin to internalize values of care and respect and model a critical and engaged citizenship.

One lead teacher states:

"If there's some fight, I bring the children in here. We sit down and discuss it. You take the time to do that. We don't look for suspension. We want to work with the children and have them change their behavior. And I see that happening."

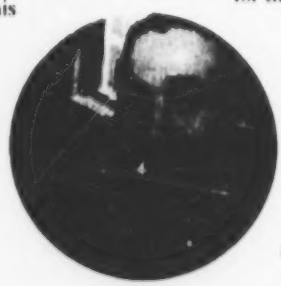
In another high school, a student darted out into the hallway in the middle of class and began a fight with a student passing by. Rushing after the students, the teacher tried to break up the fight. Two large seniors attending the small school intervened and divided the students. The teacher commented that she could not have broken up the fight without the seniors' help. The seniors talked to the student for about 20 minutes and then returned him to class. Students as well as teachers in this school were working to make the school safe.

When small-school students were asked why they fight less than students in the host school, they answered, *"Because we know one another."* Our data coincide with findings from the CCSR 1999 student surveys. Students attending freestanding elementary and high schools felt more confident than other CPS students to help people solve their problems, negotiate conflict, and work with other students. Moreover, students in elementary SWSs tended to report feeling more able to navigate conflict than students in their host schools . Students at small schools build relationships and the skills to cooperate, disagree, and negotiate with students and teachers.

We found that elementary and freestanding high schools were able to establish substantially safer and more stable learning environments than conventional schools. Students attending freestanding elementary schools reported significantly fewer disruptions in class, high levels of respect among students, and a greater tendency to support academic achievement than students in conventional schools did. Moreover, some freestanding schools were able to establish extremely safe environments, better than 84 percent of other elementary schools. Students found the new freestanding schools to be calmer, more focused, and safer than conventional high schools and elementary schools.

Although students felt safer within the confines of their schools-within-schools and were extremely engaged in their activities, CCSR surveys revealed that SWS students still felt as unsafe in the hallways, bathrooms, and areas surrounding their school as did students in their host schools. The CCSR safety questions ask how safe students feel in hallways, bathrooms, and areas surrounding their school. Since SWSs are housed in larger schools, students' safety in these common areas is often beyond the scope of the SWS.

In general, it has been found that violence in the school's community or the students' neighborhoods is related to students' perceptions of school safety. Some may misinterpret this finding to suggest that when students come from high-crime neighborhoods their schools will also be unsafe. Our research demonstrates that small school size may alter this relationship. The size of freestanding small schools coupled with concerted efforts to develop important human relationships have been important in creating safer school environments.



Accountability is strengthened among students, parents and teachers.

"When I was in elementary school, I was a poor student. When I was in eighth grade, my teacher told me he would help me get in here, because this was a school that would be good for me. At first I was below level, and now I am above. In my old school the teachers said everything had to be handed in on one date, but here the teachers are more organized and they will help you. It's more about the process, not the deadline. No one is strictly by the book—they have a head and a heart. And they get your parents involved."

Our data demonstrate that small schools that are sustained over time have created internal communities of accountability among students, parents, and staff. At a school dedicated to afri-centric principles and practices, the lead teacher comments:

"The [students] know we are in a continuous circle. We're only as strong as our weakest link. That's important in the black community. We are held accountable to each other."

In these instances, students have a rich sense of community within their schools, and among their schools, neighborhoods, and cultural lives. As one teacher states:

"It's harder for kids to fall through the cracks. We observe problems and then we come together and talk about individual kids so we can figure out how to help them. It's hard for the kids to hide, and it's real hard for kids to cut classes. The kids know that they can't cut because they always get caught. As a teacher, I have a better sense of what kids are doing and have more control."

Students are aware that they are held accountable for their actions.

As one student comments:

"The teachers always give you attention. They really care about us. My teacher knows when I'm doing good or not."

It is difficult for small-school students to be anonymous since teachers know when they are struggling or succeeding.

When elementary school students who were moving on to high school were asked, what they would miss most about their small school, they had the following to say:

- *"The teachers because they kept my grades up";*
- *"This school taught me how to never stop trying";*
- *"The mediation – it's conflict management";*
- *"Smaller classes — and we learn more";*
- *"More challenging work"; and*
- *"You learn your lessons and what comes next."*

All of their comments mirror the conditions that students use to describe their prep schools in *Lessons from Privilege* (Powell, 1996)—that they are geared toward success. Their teachers push them, while acknowledging differences. It seems significant to us that students from the lower-performing schools in Chicago's system are beginning to feel committed to their schools and to demonstrate their commitment by echoing the sentiments of students in some of our nation's most privileged schools.

Finding: **Teachers felt more committed to and more efficacious in small schools.**

"The smallness has created a sense of commitment and camaraderie that you would not find in a large school."
–Lead teacher

How teachers perceive their work inside small schools is an important factor in determining whether small schools contribute to improved student achievement. We looked at teachers' professional community, which, based on the measures in the CCSR teacher survey, includes: teacher satisfaction, collaboration, continuity, professional development, and heightened commitment to student learning.

Our research demonstrates that taken together these factors facilitate transformations in instructional practices. Small school teachers were more likely to:

- report a strong professional community;
- report being satisfied in small schools;
- collaborate with and learn from colleagues;
- engage in professional development that they found to be valuable;
- build coherent educational programs for students across disciplines and grades;
- have a greater sense of responsibility for students' academic work and ongoing learning;
- create a focused learning environment for students; and
- add to and change their instructional repertoire when working with students.

Small-high-school teachers tended to report a stronger professional community than teachers working in other high schools. We examined eight measures of professional community, ranging from teachers' professional-development experiences to the degree to which they work with their colleagues (see Table 14). These indicators were created from teachers' responses to CCSR's 1997 citywide survey of teachers (see Appendix B for a description of the survey.) Teachers in small high schools tended to report feeling that they were members of a stronger school community than teachers in their host schools and other high schools. This effect was especially consistent and strong for teachers working in the one freestanding high school and the 21 SWSs housed in the three multischools. Although the SWSs significantly outperformed the host schools on only one measure, school leadership, teachers in SWSs tended to report higher levels of professional community, openness to change, organizational trust, and professional development than teachers in their host schools and, often, teachers in conventional high schools. Because of the small numbers of high schools and the low number of teachers responding in small schools, it is important to examine the size of differences as well as their statistical significance.

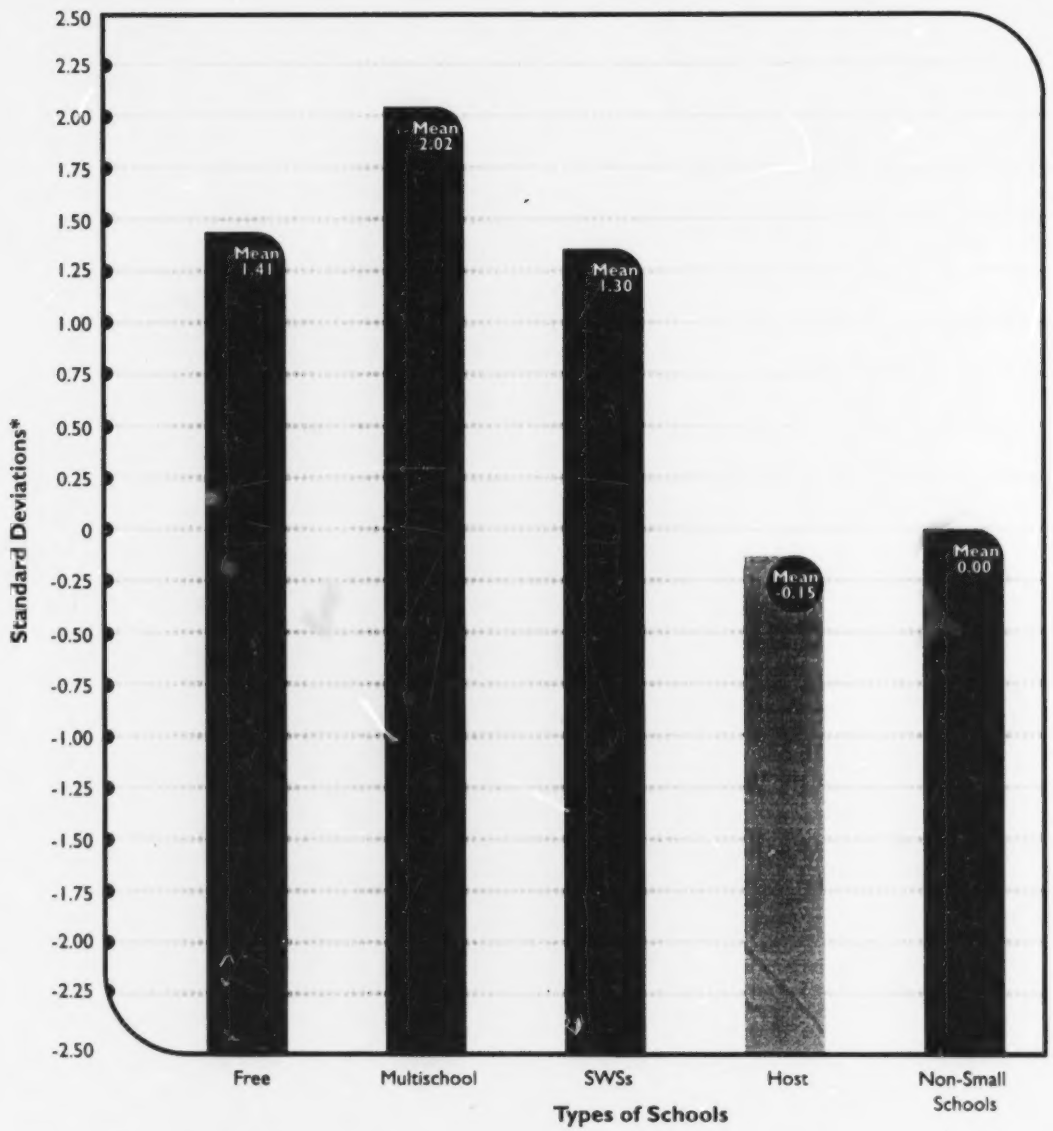
Similar to the high schools, elementary school teachers working in freestanding small schools consistently reported working in a better professional community

Table 14: 1997 Measures of Professional Community

Teacher Measures	Scales Used to Create Teacher Measures*
School Leadership	• Teachers' involvement in school decision making • Ratings of the teachers' perceptions of their principal as an instructional leader • The degree to which teachers feel the programs at their school are coordinated with one another and with the school's mission • Whether teachers view the principal as a facilitative and inclusive leader
Parent & Community Involvement	• Teachers' commitment to learning about their students' and school's community • Teachers reported their efforts to understand parents' problems, invite them to visit the classrooms, seek their input, and generally build trusting relationships • Parent participation and support for the school • The extent to which teachers interact with the school's community • The extent to which teachers use the local community as a resource in their teaching and in their efforts to understand their students better
Professional Community	• The degree to which the staff has a cooperative work ethic • The tendency for teachers to sustain a public dialogue to solve problems • Teachers were asked how many colleagues feel responsible for students' academic social development, set high standards of professional practice, and take responsibility for school improvement • The extent to which teachers talk to one another about instruction and student learning • The extent to which teachers feel their school's goals and actions are focused on improving student learning
Work Orientation	• The extent to which teachers feel loyal and committed to their school • The degree to which teachers are continually learning and seeking new ideas, have a "can do" attitude, and are encouraged to change
Organizational Trust	• The extent to which teachers and parents support one another to improve student learning and feel mutual respect • The extent to which teachers feel their principal respects and supports them • The extent to which teachers in a school have open communication with and respect for one another
Openness to Change	• The extent to which teachers participate in professional development • Teachers' sense of how receptive their colleagues and principal are to change in their school
Uncoordinated & Poor Professional Development	• The degree to which professional-development topics were followed up on, if teachers had to seek out professional development with no help, and if professional-development activities advocated practices they did not believe • Asks teachers about their experiences with professional development such as whether their professional-development experiences influenced their teaching practices, helped them understand their students better, and provided them with opportunities to work with colleagues and teachers from other schools
Limits on Students' Abilities	• Teachers were asked if their students are not capable of learning, cannot work independently, and are not ready for higher-order thinking. A high score indicates that teachers view their students as having limited capabilities to learn

* All but one of the teacher measures were created by combining scales created by the CCSR for their research on the CPS. Scales were combined by weighting their scores by coefficients attained through factor analyses (see Bilcer, 1997, for in-depth discussion of the scales).

Figure 6: 1997 Teacher's Report of Their School's Openess to Change Controlling for Teacher & School Demographics

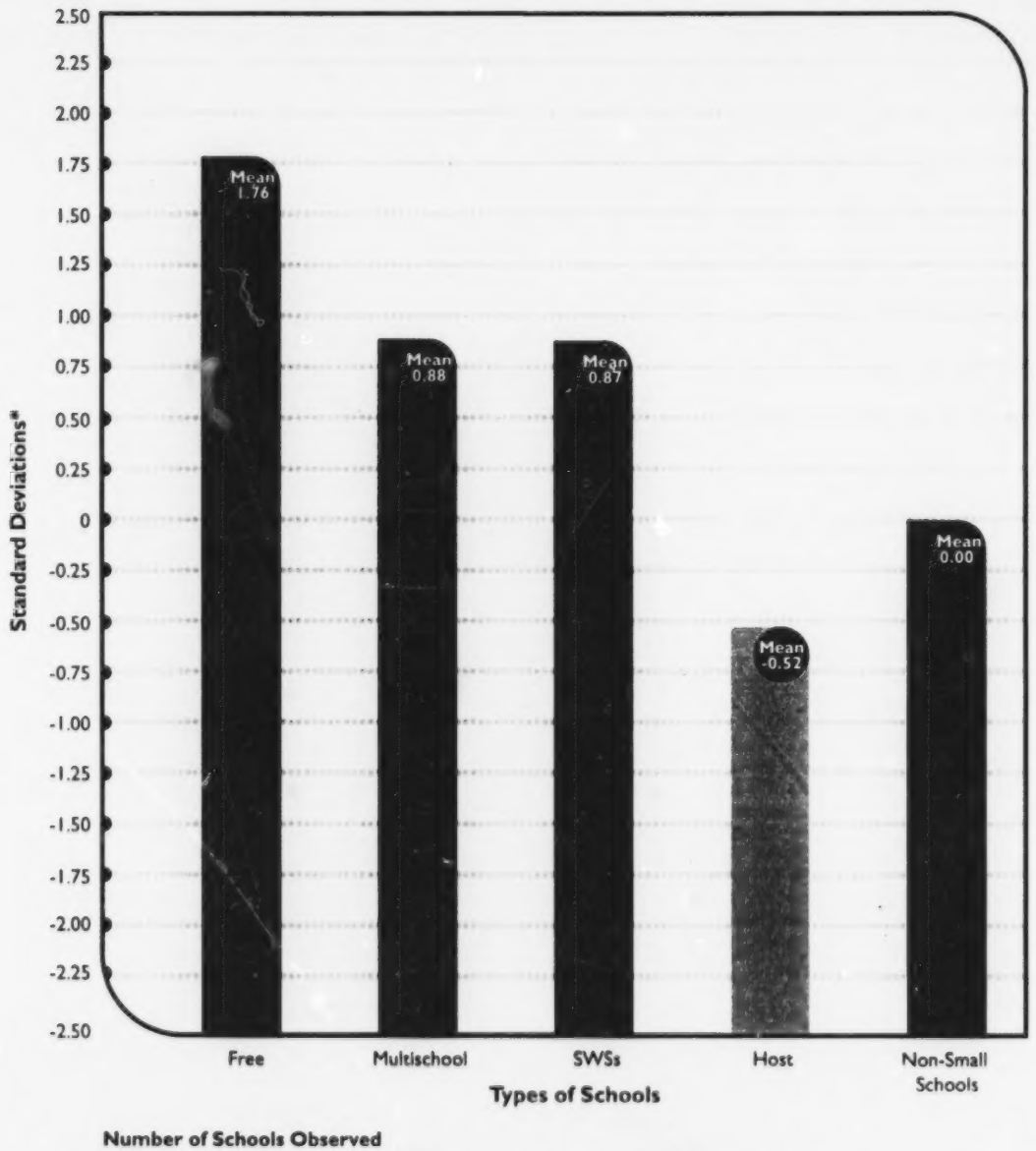


Number of Schools Observed

1 Free | 21 Multischool | 14 SWSs | 7 Host | 40 Non-Small Schools

*These standard deviations were calculated by dividing the estimate of school performance by the variance among schools calculated in HLM (See Techinical Notes)

Figure 7: 1997 Teacher's Report of Their School's Professional Community Controlling for Teacher & School Demographics

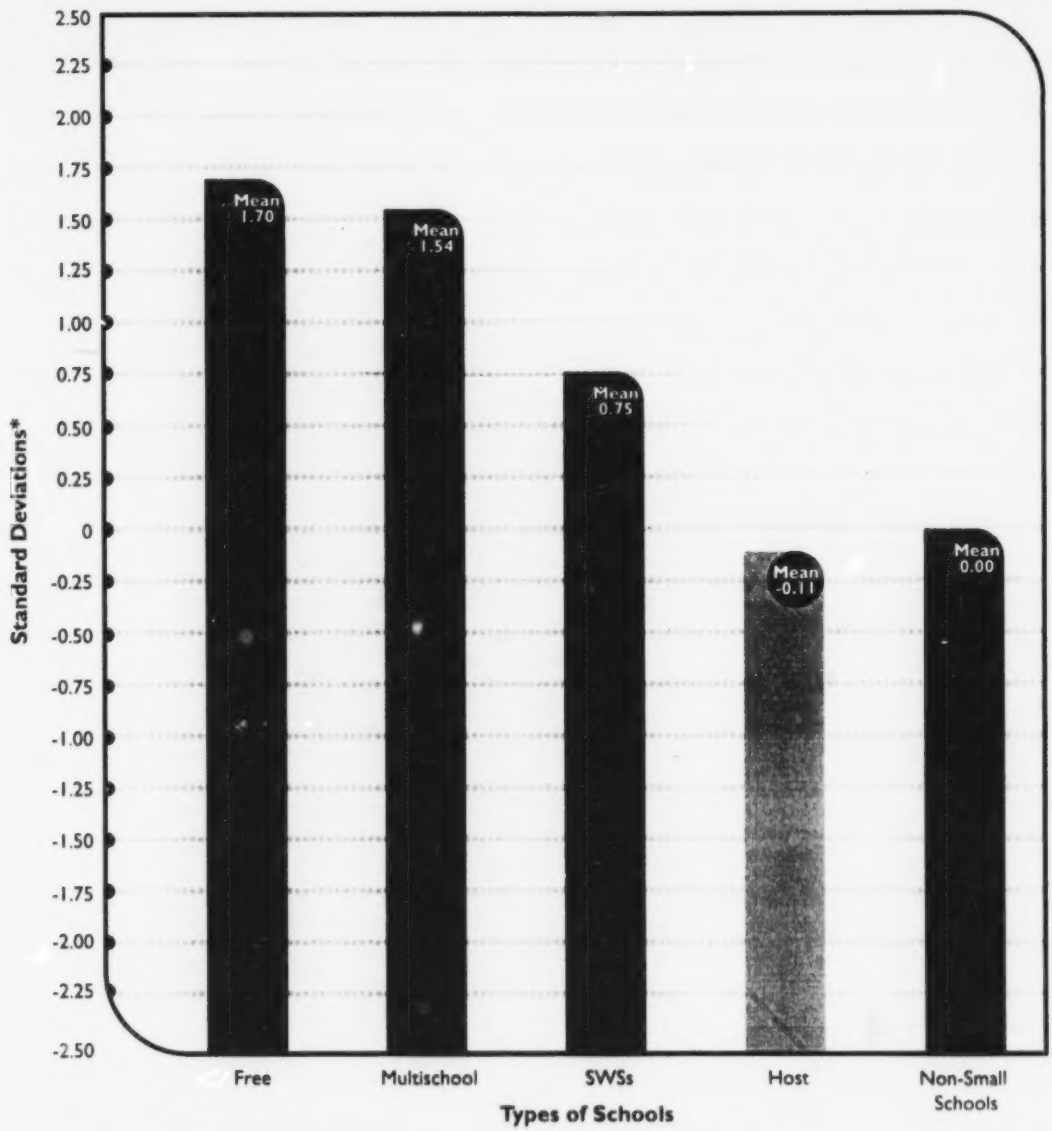


Number of Schools Observed

1 Free | 15 Multischool | 11 SWSs | Host | 41 Non-Small Schools

*These standard deviations were calculated by dividing the estimate of school performance by the variance among schools calculated in HLM (See Techinical Notes)

Figure 8: 1997 Teachers' Report of Their School's Level of Trust Controlling for Teacher & School Demographics



Number of Schools Observed

1 Free | 21 Multischool | 14 SWSs | 7 Host | 40 Non-Small Schools

*These standard deviations were calculated by dividing the estimate of school performance by the variance among schools calculated in HLM (See Technical Notes)

than teachers in conventional elementary schools. Teachers in multischools, however, tended to report working in a school environment slightly, but not significantly or substantially, better than the ones reported by teachers working in other elementary schools. The weaker effect of multischools at the elementary level may be related to their structure. Unlike high-school multischools that are divided into SWSs with themes, most elementary multischools are divided by grade levels. The mission of a thematic school may help bind teachers together more coherently and productively. Freestanding elementary and high schools and multischools at the high school level reported school environments that were often significantly or at least slightly better than those reported by other high school teachers, once teacher and school demographics were controlled.

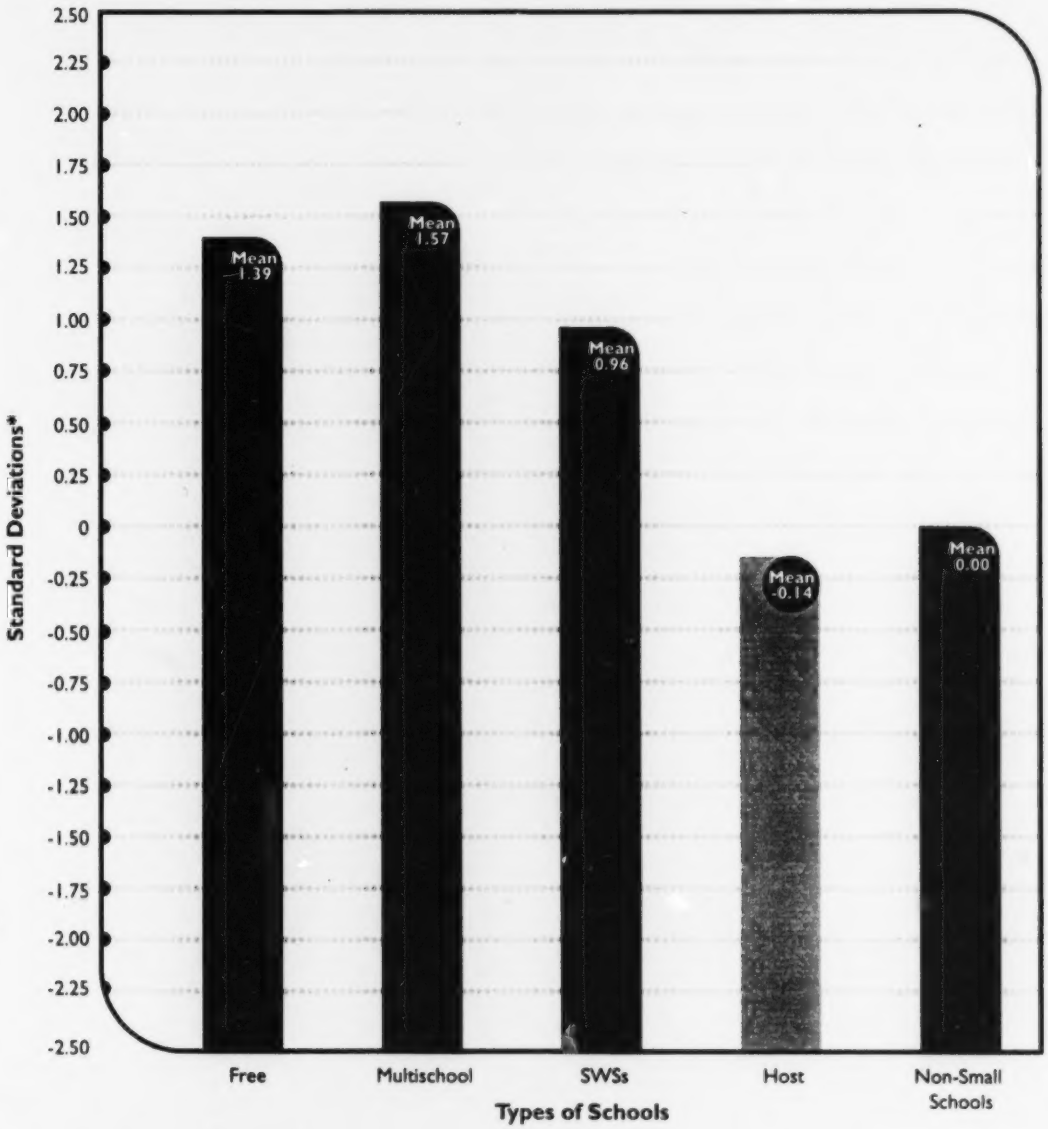
Except for openness to change, elementary teachers working in SWSs reported working in school environments very similar to those reported by teachers in the host school. Moreover, on some measures, such as school leadership and work orientation, elementary-SWS teachers and teachers in their host schools reported working in environments significantly worse than those reported by teachers in conventional elementary schools. Teachers in elementary SWSs and multischools were not reporting significant benefits in their school community. This runs in opposition to our fieldwork, in which we experienced growing and strong professional communities in the elementary SWSs.

The elementary SWSs may have low reports relative to the system and similar reports to their host for a variety of reasons. In our fieldwork, elementary SWS teachers discussed tensions that existed between the SWS teachers and those in the host school. These tensions may have lowered their evaluation of their overall school. Moreover, elementary SWSs were more likely to be founded in poorer-performing elementary schools, and therefore it is not surprising that they had a weaker professional community in 1997. Many SWSs had to overcome a poorly operating professional community as well as try to establish an effective one. This is a challenge at times. The fieldwork shows that stable SWSs do develop stronger communities over time. Moreover, the survey was conducted in 1997. The difficulties in starting small schools and establishing them inside a larger school may have prevented teachers from reporting improved school environments in their first few years of operation.

Finally, all of the small-school environment effects may be weaker at the elementary level because elementary schools have stronger school communities than the high schools. More so than the high schools, elementary schools are actively addressing issues of professional community. On some measures, the stronger-performing high schools report school environments equivalent to that of the average elementary school (Sebring et al., 1995). It therefore may take more time for any elementary school reform to change teachers' perceptions of their school environment and surpass the norm. In contrast, the small schools may be able to make a quicker impact at the high school level because of the weak school communities that characterize many of the high schools. Because the survey was conducted when many of the small schools were young, we focus more on our qualitative data and the high school data in the following sections.

The stronger professional community we observed in the high schools' survey data, the freestanding elementary survey data, and our fieldwork suggest that teachers in small schools respect and trust the skills and insights of their colleagues. An intense camaraderie developed among teachers in small schools as they struggled to make their schools work. The qualitative data revealed four themes, which are generally consistent with the survey data, about the professional communities in small schools: There is (1) greater faculty accountability and collaboration; (2) a strong desire for continuity across subject areas and grades; (3) greater concern for professional development on the part of the staff; and (4) a high level of commitment to student learning.

Figure 9: Teacher's Reports of Their School's Professional Development Controlling for Teacher's and School Demographics



Number of Schools Observed

1 Free | 17 Multischool | 13 SWSs | 7 Host | 39 Non-Small Schools

•These standard deviations were calculated by dividing the estimate of school performance by the variance among schools calculated in HLM (See Technical Notes)

Teachers are far more satisfied in small schools. Inside the small schools, teachers state that they have a greater ability to connect with students and other teachers and that they can respond to their own passion for teaching. One teacher echoed the comments of many:

> *"The most powerful thing [about being in a small school] is that I learned I still enjoy teaching. I didn't my last couple of years [in the conventional host school]. I was apathetic to the point that I took off the day of the class Christmas party—can you believe that? I was just tired, burned out. We had to be tough and hard and stern and mean…I have regained my joy of teaching. I love coming to work."*

Moreover, teachers reported that they could not imagine returning to regular schools after teaching in small schools. One teacher expressed, "I was not willing to stay in the CPS until I got into a small school. I would rather pour coffee at Starbucks...because I was very frustrated at not being able to teach." Teachers in small schools are more able to influence the structure and direction of their school. The average SWSs scored 1.48 standard deviations above the average school, or higher than approximately 93 percent of the other high schools, on measures of school leadership that assess how much teachers feel they can influence policy. Because the decision to completely divide a school into small schools is often made by the principal, teachers in these schools may not feel they have as much influence over school policy as teachers in SWSs.

A lead teacher of a small SWS describes the "transformation" that she and her colleagues experienced once the small school was in place: "Each of us was able to use our ideas and put them into place, and it was more meaningful, and all of us felt like we did when we first started teaching...[a] burst of energy." This type of testimony suggests that small schools help teachers express their enthusiasm for teaching, while larger schools tend to inhibit these feelings. Teachers working in small high schools supported change to a much greater extent than teachers in other high schools. For instance, the average high school SWSs and multischools scored at approximately 1.3 and 2.0 standard deviations above the average, respective to teachers' reports of their openness to change. This means that the average SWS and multischools reported being more open to change than approximately 90 percent and 98 percent of other high schools, respectively (see Figure 6). Small high school teachers were open to change and seeking new ideas. Our fieldwork confirms that teachers teach better in small schools, not that better teachers select small schools as places to work.

Teachers are more likely to collaborate with colleagues in small schools. One of the features of small schools is the opportunity for teachers to work with one another. Small schools require that teachers communicate more closely and productively. According to the 1997 CCSR teacher surveys, small-school teachers were more likely to design instructional programs together, to share and coordinate their instructional practices with their colleagues, and to work collaboratively with other teachers and staff members to make the school run more effectively. Again, the average SWSs and multischools reported substantially stronger professional communities than about 80 percent of other high schools (see Figure 7). By allowing teachers the opportunity to sit together in small groups and work with one another over time, teachers in small schools began collaborating and coordinating their efforts more. The collaboration also extended outside the classroom. Small-school teachers tended to report higher levels of trust between and among themselves, parents, and the principal (see Figure 8). Moreover, collaboration among faculty may enable them to use their time together more efficiently to address concerns regarding specific students and the school at large.

For example, in one small-school staff meeting, the teachers were discussing how their students could best be supported in completing a large semester project. The teachers discussed the research process and the role each subject teacher should play in completing the project. During the discussion, the science teacher

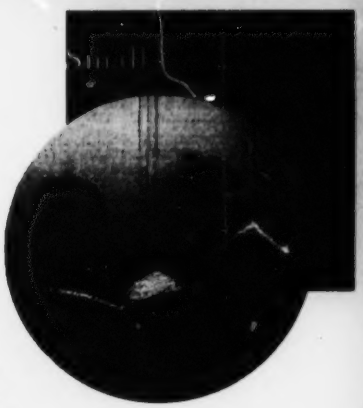
agreed that he needed to divide the project up into more steps so students learned about the research process and reduced the likelihood of completing the project at the last moment. Moreover, by breaking the project into steps, the English teacher could help students learn how to take better notes and prepare outlines for their projects—which was a problem the science teacher recognized the previous year in his students. Teachers could discuss the skills students lacked and divide up the responsibilities for teaching students those skills. Most importantly, those same teachers met at the end of the project and jointly critiqued their students' performance and the effectiveness of their strategies.

Another example of faculty collaboration is exemplified in the high school that prepared integrated units for their incoming classes. The lead teacher described the "Island Unit" as one of the most creative, interesting, and imaginative projects that was done at the school. In geography class, the students, who worked in groups of four, were asked to create an island, give it a name, and give it certain geographic features, physical structures, and transportation capabilities. In English, students were asked to prepare documents including a history of the people, a description of how the island was discovered, and the national anthem. And in art, the students had the option of preparing a model of the island in paper maché, clay, needlepoint, or hook and rug.

Due to the general nature of small schools, the physical proximity of classrooms, and the support and camaraderie of the faculty, teachers benefit and learn from their colleagues as resources. One teacher explained that when she was in a larger school, her classroom was isolated from the other classrooms of the same grade. This physical distance and the disposition of the other teachers did not make it easy to share ideas about the curriculum and teaching practices. In her small school she can "go right across the hall, at any time, and discuss what is happening in [her] classroom" with the teacher who is teaching the same grade.

Greater communication among the staff translated into higher levels of accountability through a variety of mechanisms besides simply knowing more about students' strengths and weakness. For instance, small-school teachers could draw upon one another's strengths to collectively deal with student problems. In one school, the math teacher played the role of disciplinarian and developed creative punishments for students who misbehaved in any of the classes in the small school. The students respected her and held her in high regard, and the other teachers used her as a resource. In one instance, a student who routinely attended her class began missing other classes in the small school. When the math teacher found out, she began tracking his attendance and held him accountable for his attendance at all the classes in the small school. Small schools enable teachers to draw on each other's strengths and hold students accountable to the same behavioral standards across all their classes.

Teachers in small schools are more likely to engage in professional development that they find valuable. According to 1997 CCSR teacher survey data, teachers in small schools were generally more likely than teachers in their host schools and other CPS high school teachers to report that their professional-development experiences had been sustained and coherently focused, that they included opportunities to think carefully about, try, and evaluate new ideas, and that these new strategies helped address the needs of the students in their classroom. The average SWS high school and multischool professional-development reports were better than 83 percent and 94 percent of other high schools, respectively (see Figure 9). Moreover, teachers in different subjects began seeking complementary skills and professional-development opportunities as the mission of the school helped teachers unite the curriculum or instructional strategies across the different course areas.



One of the advantages of the small schools is that the majority of them worked hard to create a clear mission and focus. As that became more clearly defined, teachers were more able to link the professional-development opportunities they needed to their instructional goals. Interviews with small-school teachers revealed that they were aware that professional development was a necessary, career-long endeavor that addressed academic content as well as instructional practice. What was especially striking about this group was how reflective they were about the purposes and practices of professional development. Three of the major concerns that these teachers expressed were (1) the need for more professional-development strategies that were implemented throughout their small schools with ample time for systematic implementation, evaluation, and revision; (2) the desire to learn from others, preferably other teachers, who would be available to them to discuss how particular strategies could be tailored to their classrooms and schools; and (3) the desire for the professional-development opportunities to directly affect their classrooms and their students' learning.

In the best of the small schools, the professional development that these teachers were seeking was different from conventional approaches. For instance, one school worked with its board of directors, who provided the support the faculty needed to work during the month of August, part of that time at a retreat setting, to analyze their standardized test scores and to develop a schoolwide plan for improving their own skills in teaching reading. Another group of teachers, in collaboration with their museum partner, secured a group Fulbright Abroad so that they, as a subset of the faculty, had time to build culturally relevant curriculum for their students while improving their own bilingual skills. Another school was working with an outside consultant to build an Afri-centric curriculum for their children because they thought such content was more likely to engage the kids. Small schools like these were constantly looking for the resources they needed in order to secure professional development that would help the whole school community work on issues that were problematic for their students. This is a markedly different approach to professional development that places more emphasis on individual teachers' interest selected from a smorgasbord of possibilities and delivered as short-term workshops.

Teachers are more able to build a coherent educational program for students between disciplines and across grade levels. Teachers in small elementary and high schools were better able to track students' learning processes across grades. Third- and fourth-grade teachers could discuss which skills third graders should have coming into fourth grade and then build on those skills. The small-school strategy enabled them to create curriculum that extended from one grade to the next, and experiment with new educational themes, all while working closely with other teachers. In one high school that was struggling with issues of academic rigor, the teachers created lists of skills students should have after each year in the high school.

One teacher commented:

> *"When it comes to subject areas, we know what we've covered, we know what we need to cover."*

Something as simple as mapping the requirements for each year as a group provided a greater sense of continuity. As teachers in small schools created instructional plans, teachers felt greater responsibility to their peers to successfully develop students' skills.

> *"It's important to make sure that we're connecting ... If I'm teaching reading, it still needs to connect with Ms.— math. It still needs to connect to Ms. – writing assignments and Ms. – literature work. Even though we're doing different things, we still need to make sure we're on the same topic, the same skills."*

In a number of the small schools we visited, faculty worked with students over time; that is, faculty moved with their students as they advanced to the next grade. Several teachers state that this approach has benefits for them as well as for the students. Over time, teachers get to know what the students know (and don't know), and that allows the teachers to develop appropriate curricula and apply useful instructional practices without having

to repeat content unnecessarily, explain the rules of the class, or get to know each other from scratch.

"For three years [our kids] know the teachers they are working with. There's no downtime where you have to go over the rules again."

It is a significant departure from traditional practice when high school teachers carry their students from one year to the next. In the small high schools, especially SWSs, a small set of teachers teach the same set of students for three to four years. This is in contrast to conventional high schools where the teachers are responsible for a variety of classes with different students that change each year. In this new environment, teachers tend to mold the curriculum to their students' strengths and needs instead of teaching a set curriculum around a subject. Teachers believe that this change is much more likely to enable them to build their students' skills.

Even in small schools where the teachers change students each year, the teachers' experiences are fundamentally different. In these schools, teachers can meet with teachers in their own grade level and across the grade level and truly talk about how to connect one year's experience to the next. This is very different from other schools, where teachers meet only with teachers in their own departments and rarely discuss actual students and specific problems with classroom instruction.

Teachers demonstrate a greater sense of responsibility for ongoing student learning. Across the eight schools, we heard teachers describing a sense of personal responsibility for students' academic work, past, present, and future. Fears and concerns were particularly apparent when eighth grade faculty described the lengths to which they go to assure that their "babies" are going to "good"—safe, rigorous, and college-bound—high schools. This is also true of the high schools—one high school offers an internship program that prepares students to think about their post-secondary plans. Another high school has a very active and strong vocational program. Each of these schools makes sure that all of their eligible students participate in these programs in an effort to prepare the students for post-secondary opportunities.

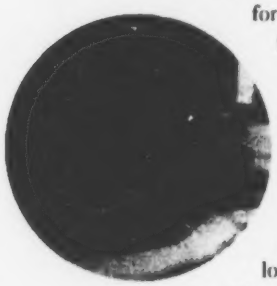
Faculty members devoted personal time to take students on trips out of the neighborhood schools. They wrote letters and made phone calls—and this from faculty members typically working without the resources of a school counselor. Some teachers were thrilled that students from their elementary schools were going to noteworthy high schools. Other teachers wished they had another year "with [the students] to keep their skills moving." At one school, when three particularly "difficult" eighth graders were retained in the grade because they had not performed adequately on the ITBS and the host-school principal had "recycled them back into the host school," the small-school teachers went and "fished them out. No matter what, they are our students, our responsibility. We'll get them through."

At one high school, the teachers scrambled during senior year to make sure all their students were on a trajectory to graduate, and the teachers met individually with students to make post-high school plans. Moreover, the teachers could also point out the four or five students who weren't going to graduate and they were trying to work with these students to make some plans after high school that would help them find a job or get useful training. The teachers showed frustration and worry about the future of the students not finishing, but they did not degrade the students' potential.

New approaches to professional development decreased small-school teachers' reliance on and use of traditional teaching methods. In the eight schools we studied, teachers were working to make students become critical thinkers proficient in analyzing information and asserting their opinions instead of memorizing and reciting facts and information.

Small-school teachers provide a more focused learning environment for students. According to the 1997 teacher-survey data, small-school teachers were more likely than teachers in host schools and other high schools to report that their schools focused on what was best for student

learning. Small-school teachers were more likely to have well-defined learning expectations for all students, set high standards for academic performance, and organize the school day to maximize instructional time. One example was shown by teachers in a SWS who, based on an examination of their students' skills, agreed that they wanted to implement a phonics-based reading program. This SWS committed a substantial amount of one teacher's time to acquiring and instructing the other teachers to use the new approach. By partially freeing this one teacher from classroom responsibilities, the SWS was able to acquire the technical expertise and feedback it needed to successfully implement the program. As a result of this effort, the SWS's students significantly outperformed the host-school students on the standardized reading tests.



It is not unusual in conventional schools for teachers to blame students for lacking effort or for being lazy, or to blame their families for being uninterested in education. In the small schools, teachers seldom disparaged their students or their families. Rather, we heard faculty searching among themselves for strategies to engage students long disengaged from public education. For instance, at one school, educators recognized that in order to elevate literacy levels, they needed to have students focus rigorously on reading and literature. By converting basal curriculum into a literature rich curriculum and by varying their approaches to teaching reading, these middle-school educators now dedicate three hours a day to literature—reading, writing, and analyzing. Their ITBS score rose from 14 percent at or above median to 28 percent at or above median in the course of two years. This willingness to commit to student learning, rather than abdicating responsibility, made these teachers stronger advocates for their students.

Teachers built a more varied instructional repertoire for working with students. An important focus of our investigation was how small schools produce opportunities for academically challenging and creative, student-centered, learning environments. We saw teachers grappling with and preparing cross disciplinary, multiage- grouped, engaging work. We believe that these classrooms were the norm in the qualitative sample and not the exception. In our fieldwork, we consistently heard small-school teachers seeking out innovative and creative ways to engage their students. Teachers expressed how enjoyable their teaching had become inside the small-school environment. One teacher explicitly stated, "I don't feel like I have to sneak to be creative in order to teach." Although the creative techniques being used by the teachers could have been used in larger schools, the support by other teachers and principals, along with the growing focus on student learning found in small schools, provided teachers with the security to try new approaches. In the most successful small schools, teachers were looking for effective new teaching practices and longer periods of instruction so that they could create more engaging work and build sustained effort. At one school, a faculty member describes, *"This is a different way to teach. When you move away from the center of the room...you develop ways kids can learn from each other... from books...from Internet research...from talking to each other...from interviews...It's harder to teach."* The importance of incorporating student realities into the academic curriculum was echoed in almost all of the schools in our qualitative sample.

Finding: **Successful classrooms in small schools were targeted at improving the skills of their students, and the work that students were presented with was engaging and challenging.**

In successful classrooms, teachers:

- motivate students to research, interpret, and critique information;
- employ various instructional approaches to teaching concepts and skills;
- integrate curriculum units across subject areas;
- use approaches that encourage student participation;

- use cooperative and group learning strategies;
- engage students in mentoring or tutoring other students; and
- engage in peer critique.

School size alone does not necessarily lead to good instruction. Unfortunately, across the country, there are many small schools where student performance is still problematic. In order for the size of the school to have an impact on student learning, it has to influence and facilitate greater instructional variation, class size, the quality of the task, and the clarity of the skills and knowledge teachers wish to inculcate. The work that students do needs to be rigorous and focused. When we visited classrooms, we looked for evidence that important work was under way and then we tried to characterize the conditions within the school that made good instruction possible. Schools that linked student-centered instruction to high standards were better positioned to help students. Moreover, classrooms with high student engagement around significant work seemed more prevalent in the schools where vision and structure were directly connected to teaching and learning. (In many parts of the country, it is common to see vision statements prominently displayed but unrelated to the instructional practices in classrooms.) It is a complicated prospect for schools to get all of these factors lined up, but many of the small schools in our sample were working conscientiously toward that end. In order to illustrate the kinds of fresh approaches that we saw, we've included several vignettes from our field notes that reflect classroom activities.

The Youngest Students.
In a first-grade classroom, 28 students are learning how animals eat. Working from materials developed by the Chicago Academy of Sciences, the teacher moves from giving directions in English to using Spanish for the content of the lesson that has students eating like animals.

The students screech with delight as they lower their "beaks" to eat animal food in the guise of Cheerios.

A kindergarten class is set up to support the kinds of learning experiences that are developmentally appropriate for early learners. The desks are arranged in three rectangular clusters that allow for small groups of students. There is a block/play area and a reading area with books in both English and Spanish. The room is decorated with store-bought as well as teacher- and student-made objects connected to the routines and content of the class. There are posters of animals, colors, and numbers, as well as lists of helpers, calendars, class activities, and number charts. This class also has created an altar to a baby who died in a fire, something the children were concerned about.

The activity we observe deals with numbers. The teacher leads the students through a series of Spanish songs and other activities to teach students about numbers and counting. She begins with a very active, participatory song that tells the children what they should do at every hour of the day. This is followed by a counting song about the clock. They also sing a song about the days of the week, distinguishing between the days they go to school and the days they don't.

After the songs, they sit by the calendar to determine the days that need to be added to the calendar. The students help one another when one of them gets stumped. They are able to choose which colors they are going to use to write the dates on the pumpkin or leaf that will represent the next day on the calendar.

In another kindergarten class, 15 African-American students also begin with calendar work. After the students put up the date in unison, the teacher asks them how many ones should be in the one's can. "I have one in the can and I should have six, so how many do I need to add?" Students call out the answer. The teacher counts on her fingers. She puts straws behind her back and holds up three straws in one hand and three straws in the other and asks how many that makes. The children shout, "Six!" and she grins. "You are so smart! What's another word for smart?" "Intelligent!"

they shout out. She then moves to the board, where she has written, "Good Monday Morning to you, class!" She has left a letter out of the word Monday and a letter out of the date. They fill in the letter in Monday. She asks a boy to go to the calendar and find the date. Then she asks how many days are left before Halloween, a task they do with exuberance. They then move to the letter board. They are working on the letter "p." She has arranged a number of pictures of "p" words on the board. The activity leads to a broader discussion as they ask questions about porcupines and peacocks, why they look different, how the peacock feather she passes around feels. Poignant moments of exuberance and thoughtfulness intermingle.

The Middle Years.

In a fourth-grade class set up so the desks create small groups, students are editing each other's writing. They are able to explain what they are looking for as editors as well as what they were expected to do as writers. The tone of the class is serious.

On the bulletin board in another class is "WOW WORK," which features samples of kids' writing and photos. The students are reviewing math computation skills while the teacher works with them using an overhead projector.

The steps for solving different kinds of problems are posted around the room. The teacher hands out a quiz and reviews steps for each operation with the help of visual aids. The teacher explains that only one point is given for the right answer and that the rest is for the work shown. Finally, the teacher explains that when students are finished, they should take out their books and read quietly. Among the books students are reading are *Sounder* and *Martin Luther King*. These students also tutor first-graders and have started a journalism club that is putting out a newsletter.

Next door, the fifth-grade students are working on a Venn diagram that compares components of the novel they are reading. They move to the textbook for specific details that support the points they wish to make. Around this room are samples of student work. An entire table in the back of the room has three-dimensional renderings of the plots of books they have read. In addition, students have created books based on the books they have read.

In another class of 23 fifth graders, all of whom speak Spanish as their first language, there are descriptions of "Literature Circles" across the tops of the windows. The jobs of Artist, Director, Work Wizard, Character, Captain, and Connector are listed. There is a chart of beginning words, ending words, and connecting words. The task on this particular day is to write a first-person story from the point of view of a confederate soldier, a union soldier, or a wife who's been left at home. The students are engaged in their work.

Speaking in English, the teacher asks one boy to "Tell me what you're going to do." He starts to speak but then laughs uncontrollably. She gently persists, "Don't laugh, tell me," and he gets to work with her.

With another student, the teacher coaches in Spanish. "Yo soy un/un___en la Guerra Civil. En mi vida..." The teacher explains that she tries to do only English reading in school, where she can help them, and allows more reading in Spanish at home.

High School Students.

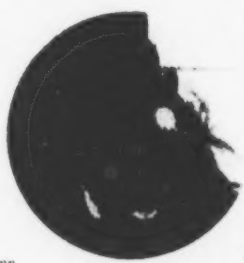
A group of high school students is working in the library. Some are using books while others are using the Internet for their research. Whether they are investigating Boss Tweed or an aspect of Puritan society, they are guided by a chart with three columns they are able to explain to a visitor: one for what they Know, one for what they Want to know, and one for what they've Learned.

The students are discussing a piece of writing displayed on an overhead projector about a crime news story that occurred earlier in the week. The task is to make the writing stronger. Following this activity, the students move into pairs in preparation for a debate. The subject is Supreme Court decisions. A list of cases is posted on the door. Sample topics include whether prayer is

permissible at graduation, and whether a person accused of a crime must be tried in the state where the crime was committed. The transition from the writing to the debate preparation is smooth, and students get down to work quickly after the teacher explains the tasks. She then circulates, asking pairs of students questions like, "Does this promote racism? Why? That's national security...or aren't they protected by the First Amendment?" They then look at a map of the library so they will not waste time when they start their preparatory research there tomorrow.

In a high school art class, the teacher explains how much she enjoys being able to have her students work on a project for 100 minutes. She is particularly pleased with the opportunity to work on integrated units of study. The current project is about self-identity. For each student, this involves a video picture and an individual writing project. A writer in residence has worked with the students, and each has created a poem based on whom they are descended from, what they love, believe, question, need, work on, would like to see, and are a member of. One of the students proudly shows and explains his rendering of a Salvador Dali-like painting, which illustrates the student's belief that life makes no sense. The deep connection to self, the thoughtfulness of the writing and editing process, and the allusion to other artwork is clear in all of the projects.

In another school, students in a 90-minute Junior World Literature class are focusing on *Fredriech*, a book about the Holocaust, as part of the Facing History and Ourselves curriculum (they will then move on to Elie Wiesel's memoir, *Night*). Students read aloud during an exercise from a Chronology of Laws Passed by the Nazis, which is included in the novel. When a student occasionally stumbles in the reading, other students correct him in positive and supportive ways. The work of this class carries over into the World Government class, where students are focusing on legislation that was developed at the time.



Findings: **Where can small schools find support for start-up, development, and continued growth?**

Small schools receive support from within the system through the Chicago Public Schools Central Office and Board, and from outside the system through external partners in the forms of universities, businesses, and civic, community, and advocacy groups. They need and benefit from both.

Chicago Public Schools Central Office

Small schools have received considerable attention and support under the current administration. As previously mentioned, in 1995, the board announced a request for proposals (RFP) to plan, start, and support small schools, and under this initiative a number of small schools were started, many of which thrive today. Since that time, the board has encouraged a number of other small schools. For example, the Chicago Military Academy—Bronzeville, which has a military curriculum, opened in August 1999 with support from the mayor, an external partner, and federal legislation. This small school has received both local and national attention. In addition, a number of ninth-grade academies that assist students in their transition from middle school to high school have been started. There are also SWSs restructuring activities occurring in high schools throughout the city. These SWSs are designed to invigorate a poorly performing school and provide parents with a variety of educational options.

During the tenure of this study, small schools (both RFP and non-RFP schools) were handled by Dr. Olivia Watkins, who has long been a supporter of small schools. Dr. Watkins and her staff of five address all the concerns of small schools, such as: start-up, finding physical space to house the schools, facilitating personnel issues, and general "troubleshooting." Support is also offered to the small schools in the form of professional development, assistance in

meeting board policies, and data collection on small-school structure and performance.

One of the explicit goals of this office is to embed small schools in the larger CPS system. In Chicago, it is a law that schools are led by principals who possess the legal administrative certification that allows them to make decisions and to be held accountable for their schools. One of the challenges of the central office is to provide principals for each of the freestanding small schools, so that the needs of the school can be clearly communicated to the board.

Part of Dr. Watkins' responsibility is to help small schools negotiate the differences between their structure and the policies and procedures of the larger system. She regularly intervenes on behalf of specific small schools. For example, she describes the instance in which a small school was approved to open, but had no building or space. (Real estate for small schools, especially in urban systems, is an enormous issue.) Dr. Watkins and her staff helped the small school to secure space, get set up, and open. Further, her office intervenes in potentially public and volatile personnel discrepancies, for instance, between a board-appointed small-school principal and a lead teacher, or between external partners and parents. Dr. Watkins explains that she relinquished one member of her very small staff to go in and act as a mediator inside a small school for an entire semester. Although her office felt the impact of the staff member's absence, it was important for the central office to provide this type of mediation.

Perhaps most significant, under Mr. Vallas's leadership, small schools are gaining systemic ground. In the spring of 2000, the federal government launched an initiative to sponsor smaller learning communities. In support of that effort, CEO Vallas stated, "The smaller the school, the better the learning environment is going to be." He encouraged his administration and the central office to embrace small schools because they believe that "smaller is better" and because small schools "do work." Mr. Vallas explained that as the number one large urban school district that promotes small schools, his administration is committed to prohibiting the construction of elementary or high schools that house more than 600 students, to restructuring the existing large high schools into smaller learning communities, and to promoting the SWS strategy for freshman and senior academies, as well as content-specific schools with focuses such as JROTC or math and science. This policy suggests that, unlike the rest of the country, which is persisting in building schools of 2,000 students and more, Chicago will truly take the lead in establishing both policies and practices of promoting and supporting smaller learning communities.

External Partners

The Chicago school-communities context is unique in urban America. At present, most schools in the city are paired with an external partner typically, although not always, selected by the core educators and/or LSC members of that school. All of the small schools in our qualitative sample, and a number in the quantitative sample, had external partners. In quite distinct ways, these partners contributed to the political viability and/or the instructional power of the small schools.

Summary: External Partners

- were not equal in skill and level of support;
- dedicated a wide range of support to small schools, depending on their expertise;
- provided resources and assistance that often influenced classroom practice;
- served as a stabilizing force for schools, especially where unstable leadership was found;
- more often than not, increased the viability of small schools and the small-schools movement;
- became more invested in the public-school system based on their contact with their own partner school.

Many Chicago schools partner with advocacy and community groups, civic organizations, businesses, and/or universities. In some instances, small schools have more than one partner. These relations may be entered into voluntarily or, in the case of schools on probation, may be mandated by the central office.

Our evidence yields three conclusions:

1. **Coherence around vision.** School/partner relations are most powerful when the partner joins in the educational vision and practice of the school. In contrast, these relations are most problematic when there is a disjunction between the educational vision of the school and that of the community partner.
2. **The power of a coalition of partners.** School/partner relations are enhanced by the coalition of small-school external partners that has developed within the Small Schools Coalition. The consolidation of partners through the Coalition has enabled a group of academic, community, and business representatives to come together, pool resources, share experiences, and combine expertise as well as exert collective leverage on behalf of the small schools of Chicago. Thus, each small school connected to the Coalition through a partner has enjoyed an enhanced array of resources.
3. **The need for political protection of small schools.** School/partner relations offer these schools not only on-the-ground instructional support but, when they are successful, provide political protection and space in which the small schools can flourish. In the best of circumstances, a partner provides necessary resources as well as political protection.

The Roles of Partners

The roles of partners vary, by intent, from school to school. And yet several general functions characterize a number of the partnerships. Some partners engage with whole-school restructuring. The associated activities include locating or reorganizing school facilities, staffing, providing professional development, individual school consultations, locating resources, advocacy, and networking with other small schools. Other partners provide professional development, including conducting workshops on academic content, pedagogy, or assessment strategies. Still others are advocates working with the central office or the legislature on behalf of the school. Most partnerships work across these three functions.

The question of efficacy emerges with respect to types of partners and types of schools. Indeed, our ethnographic observations suggest that stable, older small schools are better able to "exploit"—in the best sense of the term—these partnerships. These schools have carved, molded, and sustained a vision, creating a context for living the vision and developing the experience to meld the partner into that vision. The relation was most productive when both the school and the partner identified a central contact person responsible for sustaining and reflecting on the relationship, for keeping it honest and aligned with school goals.

To illustrate: One school partnered with a museum and the students took classes from museum staff in the visual and performing arts. These artists brought aesthetic talents to the school, as well as culture. Students painted murals all over the school, filling even (and especially) bathroom stalls with glorious images of past and present. Bright, compelling, and aesthetically pleasing, the artwork joined history, literature, and contemporary cultural struggles. Each of the murals told a story that any member of the school was able to narrate. The educational director of the museum was once a parent organizer and had much experience in schools of various sizes and histories, and sought to distinguish aspects of their partnership with this small school:

"I was really surprised at how alive the school atmosphere is. I know some of those kids, and even when they were sick, they wanted to come to school, because the artist was going to be there and they didn't want to miss out on the dance sessions or the mural. It has fostered this eagerness to learn."

Thus the arts, through this partnership, spoke a history of the school and community, while providing a common cultural and intellectual space from which youth could reimagine their future.

At another school, the university partners were central to the design of the school, the creation of the mission, the schedule, hiring teachers, and providing professional development. The school and the university faculty collaborated on the vision and the day-to-day instructional practices of the school. Quickly laid to rest was the assumption that the university faculty had all the answers.

One faculty member remarked:

"We thought we were kind of the engines that were running this show...that is, until the kids came and everyone walked into their classrooms and we stood there and looked at each other like, Now what do we do?"

The small school served as an incubator for ideas about inquiry-based, integrated curriculum, and as a source of professional development for and by teachers citywide. Reflection was organized across the small school and the university, such that questions filled the air (and teacher prep time). A culture of inquiry permeated the partnership, with curious and very smart adults trying to figure out the best practices for urban-America secondary schooling. In the early days, this external partner had to be "prepared to do anything and everything: real estate agent, recruiter, marketing specialist." But the partner's most crucial job was hiring teachers. All were recruited on the basis of their adherence to a long-planned and finely articulated vision and practice for education. Reflecting on the privileges and responsibilities of university faculty, one faculty member, who also sits on the school's LSC, remarked:

"There are so many aspects of the school to work on… We have the leisure to think about them all at once and the teachers don't, so we do in service and help with planning."

In this instance, the university partner was simply a gift to this school—they serve on hiring committees, work with students, and team-teach special classes. The collaboration is full-bodied.

At a number of schools, the faculty or the LSC reported getting "stuck" because of a district level or systemic issue. The "policy" wouldn't allow the school to follow through on its instructional strategy, or hiring, or purchasing. A phone call to one of the advocacy groups was often sufficient to create the space for the school to proceed. These groups brokered relations with the central office. Familiar with staff and with policies, and savvy about loopholes, the influence of the coalition of small-schools partners is vital. To better coordinate their efforts and to wrestle with basic policy questions, Chicago-area external partners formed a professional support organization, ASPIRE. Co-chair Victoria Chou, dean of the University of Illinois at Chicago's College of Education, explains the need:

"You could barely cut through the red tape to get into a Chicago public school. Now the doors have opened... people are learning much more about how important the relationships are."

Political savvy is now recognized as a form of shared social capital, not a resource to hide or hoard.

The charter in our sample—one of several in Chicago that began as a small school within a building—relies on the financial but also the political expertise and influence of a business-backed school-reform group and a board of directors featuring prominent attorneys and businesspeople. These partners helped the school find and finance a building.

"It's important to have the external pressure of a business group like ours to make stuff happen."

With the educators, this partner generated creative solutions to the many "lacks" of the school—a gym, library, and a lab. And, with the assistance of its partner, this school has developed a coherent curriculum built around high standards and rich student work. These efforts yielded dramatic gains in student achievement.

The reform partner explains:

"When they call, I respond. You know why? Because I know they're about kids."

In addition to instruction and political muscle, a number of external partners have simply provided for the material and intellectual well-being of the faculty. Some sponsor time and a place in the summer for full faculties to plan retreats. Another partner suggested that the small school produce a sophisticated year-end report, and offered pro bono services from a graphic designer and a printer. Yet another partner offered assistance in analyzing the relation of school size to management, discipline, and productivity. They helped principals, directors and lead teachers understand their roles in small settings, the power of networking faculty across buildings, and the strength of school-specific professional development.

In only one of the eight cases did we witness an external partner working at odds with a school. In this case the external partner sought control over hiring, budget, and other resources, whereas the principal (there were actually two during the course of the study) preferred the partner to function as an adviser. The tension undermined the academic and day-to-day functioning of the school. This tension, although atypical in our Chicago sample, resonated with some of our experiences with new small-school creations elsewhere in the nation. That is, there is an inherent potential for conflict if the "dreamers of the vision" are not themselves educators and then have to pass the academic baton to a group of educators. Thus, it seems reasonable that educators at this school felt pulled by "too many masters" while the community group believed its original vision was being threatened because they expected to "have considerable parental and community involvement. How that gets translated on an everyday basis is still up there. We're still on the outside trying to influence from a position of less power."

This issue of ownership continues to erode the political and intellectual power base of that school.

Each of the partnerships described above evolved from a voluntary relationship. Not so with the probation partners, and so it makes sense that news on those partnerships would be more mixed. In Chicago, chronically low performing schools are required and given support to have an external partner to help with school wide improvement. Several of the SWSs were located within larger schools that were on academic probation. While some probation partners provided authentic and well-received support and assistance to the small schools other problem partners did not spend much time in the small schools, failed to understand the distinct mission of the small schools, or, more profoundly, insisted on a common reform framework for the entire building, thereby eroding the defining vision of the small school. Although some of these relations were initially quite difficult, SWSs with strong missions, working with open-minded external partners, were able to build productive relations over time. The instances in which whole-school probation partners worked maximally with small schools were those sites in which the probation partner engaged with a kind of flexibility to meet the specific and delicate needs of the small school.

One last finding about external partners is crucial. A number of the partners have in the past collaborated with larger, more conventional schools, in addition to the small schools. When asked about the difference, they uniformly acknowledged a difference and a preference for working with small schools. Across the board they indicated that in these small, more intimate settings, partners got to know more than one person in a school; they were asked for more than the conventional requests for money or fundraising; they were included in planning and assessment of the small school's progress; they experienced an internal sense of accountability by educators for the youth, and they agreed to participate in long-term (often five-year) relations with schools. They felt more engaged; they saw the consequences of their engagement and, in turn, were confident to become advocates for a more rigorous public-school system.

In Chicago, as a consequence of the unique commitment to external partners, there are now networks of universities, cultural institutions, corporations, and community groups that are engaged with, supportive of, and advocates for public education. Not only do the external partners assist within schools, but they build a cadre of goodwill ambassadors throughout the city for public education. In Chicago, even with the differential skills and relations built up and around public schools, there is a democratic movement across sectors in which adults and children, inside and beyond public schools, recognize that public education is indeed a collective, urban responsibility.

Findings: Small schools are a viable strategy for systemic reform, but to do so will require that both schools and districts meet an important set of challenges.

Once we understood who was in the small schools, what the relationship was between school size and student achievement, and what conditions affect student achievement, we wanted to explore whether small schools might actually serve as a whole-system strategy for renewing Chicago's public schools. Still, while many urban superintendents are frustrated at the intractability and poor performance of large schools, and while most of them have small-schools initiatives, no one to our knowledge has considered small schools as a whole-system strategy. We know that in Chicago's case, the students in the new small schools are predominantly children of color and children who live in poverty. It seems to us all the more wonderful that the student-achievement data suggest that this strategy is making a difference in a majority of the achievement indicators. Given only two years of data, and taking into account the fact that most of the schools are very new, to begin to think about small schools as a systemwide strategy is conjecture at best. Further, they operate within a much larger system designed with large schools in mind. Challenges are to be expected. To entertain that question, we identified a number of challenges that would require serious attention and we determined a set of minimal conditions that, if put in place, have the potential to make it work.

Challenges to systemic change towards small schools included:

- some board policies and procedures that were designed with larger schools in mind and, as a result, clash with the new policies and procedures being developed for the new small schools;
- the fact that when more than one school was included in a building, interbuilding conflicts sometimes hampered the small school's ability to make the kinds of scheduling and structural changes that would enhance student learning;
- intraschool conflict in SWSs over issues of enrollment, principal support, and probation;
- issues affecting teachers such as staff turnover, magnified conflict, and teacher burnout;
- staff's ability to create a sustainable focus and then bring that focus to bear inside classrooms; and
- the conflict that stemmed from the fact that many of the new small schools find themselves under immediate, intense scrutiny while still in their infancy.

Given that the small schools created during the small-schools movement are relatively new, and given that it is a relatively new strategy for the larger system, it is not surprising that there is a host of challenges within the schools, between schools, and with the larger system.

Friction within the system. The first set of challenges results from the friction that small schools cause within the larger system. It is ironic, but not surprising, that while the central office provides enormous support for small schools by proclaiming their positive outcomes for study, by providing financial resources, and by working to promote them in the public eye, its own policies and practices are designed for a system of larger schools. During the period of our study, small schools were proliferating across the city. Given that more than 100 of them were working at any one time, their needs from

staff at the board were substantial. Small-school issues were handled in an office that was led by an educator who, while dedicated to small schools, was also responsible for several other major initiatives at the board. School faculty often wished that they had additional support from someone at the board who could help them with budget planning, staffing, space needs, and student-recruitment issues.

In addition, a number of the board's policies and practices challenged the small schools. An example is the High School Redesign initiative, which set out to improve student achievement at the high school level by providing a core curriculum with scripted lesson plans and mastery tests administered at the end of each semester in the core subject areas. Many of the small schools have invested tremendous energy in creating a curriculum designed specifically to engage their students, and the teachers are working hard to vary their own approaches to build student skills. Having to use a curriculum that structures pedagogy and assessment made teachers feel less capable of influencing improvements in student achievement.

A challenge particular to multischools was that many of the small schools had teacher-directors who guided the individual schools and one building principal for all the schools housed in that building. In many cases, central board personnel were more likely to respond to principals than to teachers. Given the volume of their work and legal restraints, that may be understandable, but since lead teachers were more directly responsible for their schools and could be more explicit in explaining a problem or a request, it was frustrating for them that they were usually unable to work directly with someone at the central board.

Friction between host schools and schools-within-schools. Student enrollment was also problematic at times. When the host school assigned a student to the small school without making sure that the student and his or her parents' interests were compatible with the school's, a major strength of the small schools was diminished. Ensuring that the students and their families would agree with the focus of the school and with the expectations of the school. Having more control over enrollment procedures was important to their long-term success.

Schools-within-schools were challenged because many of their host schools were put on probation. This had a number of implications for the small school. Despite the fact that in some cases the SWSs were performing at or above the system average, they were still classified as on probation. Thus, they had to work with probation partners who often imposed activities and/or changes that weren't congruent with their mission or with their approaches. Schools-within-schools kept hoping that the larger system would find a way to distinguish high academic small schools from their academically struggling host schools.

Some challenges emerged from conditions within and between the schools. Many of the small SWSs wished to change schedules and/or the length of the day. Since the larger school had only one bell system, bells and student passing time interrupted everyone's classes. In some cases the desire on the SWS's part to change the length of their own school day needed to be decided upon by the larger school because of custodial contracts or busing schedules. These types of decisions often impeded small schools' efforts to have more control and be more responsive to the needs of their schools.

IntraSchool Challenges. A major challenge to keeping SWSs open was principal turnover. Between 1997 and 1999, 30 percent of elementary schools that hosted SWSs experienced principal turnover. The SWSs were closed in four out of these seven schools that hosted small schools. In contrast, elementary buildings with stable principals closed SWS at a much less precipitous rate, 19 percent. Overall, however, SWSs closure was unrelated to principal turnover at the high school level. But principal change is still important at the high school level. One new principal decided to close all the

SWS's in his multischool and restructure the school into a conventional high school.

There was also a correlation between school poverty and principal turnover. In struggling schools, where administrative stability and leadership is crucial, principal turnover was the highest. The strongest schools were those that had stable principals who buffered the small school from excessive interference and who could get answers to questions and resources that they needed.

Teacher challenges. Many of the teachers in these small schools were incredibly dedicated and hardworking. Their commitment to their students was remarkable. Still, despite these enormous strengths, several issues felt seriously problematic to the teachers. A number of teachers feared burnout. They often extended their workday and workweek to call parents, to have planning time with colleagues, and develop and sustain the identity of the school. In addition, because the schools were new, they were working as a group to design policies and practices that made a difference, and they had to spend additional time as a group diagnosing their students' learning needs. These small schools often seemed all-consuming to them, and yet their salaries were the same as for those who put forth less effort. Many wondered how long they could keep it up. Further, they were frequently called on to go to grade-level meetings in host schools if they were in an SWS, and to provide leadership to the host-school faculty if they had been particularly successful in the smaller school. Teachers felt that their own commitment of time and energy was substantially increased in taking care of the smaller school without the added responsibilities of providing support for the larger school.

Staff conflict. As might be expected, conflicts occurred between staff in these small schools. Because there were fewer people, these conflicts often took on much greater proportions, disabling schools in a way that would not have happened in a larger setting. As one teacher stated,

> *"Small schools are like small towns: People know one another and like one another and don't always know how to disagree. So when you don't disagree in a staff meeting or something, it is assumed that you have given passive consent, and this is not always the case."*

An external partner noted that teachers coming from conventional schools never have to deal with this because decisions come down from the principal. He went on to say that this is something small-school teachers need to learn how to do.

Teacher turnover was an important challenge. In many cases, staff members who support the mission and vision of the schools are handpicked; therefore, replacing them may take some effort. When one faculty member leaves, the rest of the school feels the impact. This is especially true when the person who leaves has played a central role in the school's functioning. Further, there are usually not "extra" teachers available who can take up the slack.

Opportunities for focused, sustained professional development were not as plentiful as teachers felt they needed. Teachers relayed that, although they sought it, it was often hard to find professional development that provided support at the school sites and was focused on the particular needs of their students. For instance, many of the secondary teachers had students who could not read anywhere near their grade level. Because they were trained as secondary teachers, they were unfamiliar with the techniques that an elementary teacher might have. While they could find short workshops, they believed that they needed instruction and help in their own classrooms while they were trying new techniques and approaches. This kind of support was more difficult to secure.

School capacity issues. Two major factors impeded the development of an academically rigorous environment: the lack of a program focus and problematic implementation. The strongest of the small schools had a very clear programmatic focus. That focus was stated in terms of the mission of the school, and then could be tracked into classroom practices. Administrators and teachers worked to figure out a program focus that could be com-

municated to students and their parents clearly and easily. Further, they built their instructional plan around the focus of the school, so we could see how the mission statement translated into concrete strategies for students. For instance, one of the schools focused on a disciplined life. It was part of their mission, and in each class, teachers used the tenets of a disciplined life to explore their subject area. Each time we were in the school, we heard and watched as teachers reinforced and used the critical thinking skills that undergirded this focus with their students. Many of the teachers were not used to working in schools that had such a clearly stated focus. They needed the skills to bring this kind of coherence to bear.

A second school capacity issue was related to implementation and the time new small schools need to show results. The new small schools were hardly off the ground before they were being asked to prove themselves. One external partner tells the humorous tale of a reporter who came to the opening of a school and asked for the school's test scores. Small-school educators frequently state that they are under constant scrutiny from the board, politicians, researchers, and the media, and they feel that they need time to get the school up and running in a stable way before they are called to account.

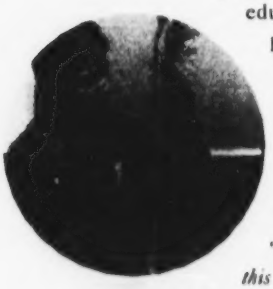
It took time for the schools to adapt their strategies to work with their students. For instance, in one of the more successful new small high schools, they focused on creating a safe and academically rigorous environment their first year. Only in the second year did the school and their students begin a stringent academic focus that boosted their test scores. In another high school, they struggled with implementing portfolio requirements in which students presented work to faculty and outside adults. In the first two years, the teachers were disappointed in the work produced by students. The fact that the portfolio sessions were disappointing caused the teachers to make adjustments each year, such as developing specific goals for each class. Although they were refining the portfolio requirement, the process and tradition of portfolios was becoming tighter and clearer. The teachers could see the capacity of these sessions and simply needed to work out the kinks to make them truly rigorous.

Being both new and innovative was a simultaneous challenge. Our Chicago sample found themselves developing everything from reporting systems to budgets to communications with parents to counseling students. Any new school has to deal with these challenges, and getting them in place is difficult even if the new policies and procedures are exactly the same as those in other schools. Students, even if they are eager and happy to be in a new school, are anxious and unsettled. Coupling this with a commitment to innovative approaches in curriculum, pedagogy, and assessment heightens anxiety and uncertainty for the students, their families, and staff.

section III

Answers, Cautions, and Recommendations

One of the high schools was a small school that shared space with other schools. The school, started in September, 1996, houses approximately 500 students in grades 9 through 12, 50 percent are African American, 40 percent Latino and 10 percent white. Students come from all over the city and represent all levels of academic achievement upon entering. Despite the distances that kids travel, the attendance rate in the school is 93.5 percent. The vision for the school emerged out of the shared philosophy between the external partner, which was a university, and the lead teachers who were interested in starting the school. They wanted to provide an "integrated, negotiated, inquiry-based curriculum" that was rich in technological applications and that encouraged independent and critical thinking on the part of the students. In addition, the faculty wanted to ensure post-secondary options for students, create a respectful environment, and develop and incorporate a policy of inclusion for special-education students and improved parent relations.



We asked students about the ways in which the school was stretching them.

Candace:

"Well, everything is different in this school. We have regular classes on two days and longer classes on two days and we have to do internships. I am working at the Child Law Center at Loyola University. There are 15 law students who represent children in child-welfare cases. We help them to get their cases together. We go on site visits with them and we help them get the information they need from the kids. Sometimes it's easier for kids to talk to another kid. We also keep the office for them. We are always trying to fix the computers. Everything breaks down when we leave—and they are so glad to see us come back!"

Jamil:

"I work at the Lincoln Park Zoo. I do inventory and take reservations in the restaurant for school groups. I take people on tours and explain to kids why they really shouldn't feed the animals.

Marciella:

"I work with the computer consultant who is in this school. He's wiring the building and getting everything set up. He just loves us—the kids who work for him. He has taught me to do wiring, to set computers up. It can be very complicated and boring sometimes because you have to concentrate on the same task for three or four hours. But it's great to learn."

Alex:

"I have always loved TV and actors. My internship is at Channel 26. Right now I am working with a producer of the homework show. It is funded by the Board of Education and we have had Mr. Paul Vallas and the mayor on our show. I started as the phone operator, since it is a call-in show, but now I am the floor manager. I really love this job and hope that in the future I will be one of the people who walks these lines."

Problems, Questions, and Answers

The problem we set out to study has multiple dimensions. Generally, our public schools are not serving students well. Too many are bored, disenfranchised, dropping out. Test scores are low, and public confidence in the competence of the education system is in a tailspin. Schools are no longer safe places; too many violent outbreaks in recent years have led us to believe that the alienation that many youngsters experience there is very wrong. Further, teachers and principals are retiring in record numbers, and young people who, for generations, provided our teaching force have new options open to them where they can earn more esteem, higher pay, and where working conditions are more conducive to ongoing growth and development. As a result, we face the greatest shortage of educators this nation has ever seen. A number of educators nationwide, and in Chicago particularly, believe that creating smaller schools will provide solutions to these problems. Their belief that small schools could reverse the negative conditions currently at play provided us with the opportunity to ask questions, to gather data, and to generate a set of answers. To review:

Where are Chicago's new small schools?

• They are in the heart of the city in the poorest neighborhoods. Who is attending these schools?

• Small schools are serving communities that have rarely had sophisticated school reform interventions. Poor, working-class, inner-city children attend the new small schools. The majority are African-American and Hispanic.

Who are the teachers in these schools?

The teachers in small high schools are much the same as other teachers throughout the Chicago system. Teachers in elementary small schools, however, tended to have a stronger academic background than other elementary teachers and tended to attract teachers with broader teaching experiences than teachers in their host schools.

What are the indicators that help us to understand the relationship between student achievement and school size?

- The indicators of student achievement include dropout rates, course completion rates, grade point averages, and standardized test scores. These are important and substantial indicators of student achievement, but all of them would have been missed if we had chosen the conventional route of examining standardized test scores alone. Thus, multiple measures are critical to our deeper understanding of what works and what doesn't, and why.
- The findings are that students in small high schools are dropping out less, completing more courses, and achieving higher grades.
- There are some improvements in the standardized test scores. While there is some improvement in reading, math scores are mixed. Further signs of hope stem from the most successful of the small schools, which were showing gains in reading scores. The teachers in those schools targeted reading as an area for their own skill building and professional growth, and their efforts seemed clearly to pay off. As a result, we believe that it is likely that if stability and continued support are provided to the new small schools, standardized test scores will improve.

What changes are teachers and principals making in small schools that they believe positively affect student achievement?

- The adults inside small schools were able to vary and make flexible the daily schedule, coordinate between and across grades, build curriculum that addressed students' needs and interests, and provide greater variation in their instructional repertoire. They were able to know the students better, to understand their strengths and weaknesses better, and to modify approaches to suit individual students' needs. They got to know parents better and were in more regular communication with them. They were able to enlist the help and support of a variety of external partners.
- Teachers and principals describe small schools as places where they feel efficacious, creative, reinvigorated, recommitted to teaching. Given the impending shortage of educators, it is important that small schools provide a means of reengaging school faculty to take advantage of their collective experience and commitment to young people. For administrators and teachers, small schools are encouraging an entrepreneurial spirit, something we have valued throughout the history of this country.
- Small schools have captured community and business collaborators. Teachers feel that parents are more confident that teachers and administrators are doing right by their children. External partners, whether they are cultural institutions, businesses, or community advocacy groups, spent time inside schools, and could know teachers, administrators, children, and their families. To reengage these constituents in our most important public institutions is by itself a tremendous boon.

• Small schools are equalizing opportunities for children who have had unequal access to quality education within the public education system. The most elite schools in this country have always been small because school size ensures that children

will be well known and rigorously supported; our findings suggest that these same conditions are developing inside the new small schools. If we can hold this course, we may be taking some of the first and most important steps toward preparing all of our citizens for participation in a democracy.

Under what conditions can small schools successfully revitalize a school system?

We believe that the minimal conditions that must be in place in order for small schools to successfully revitalize a school system change as the schools mature. First, we identify minimal conditions for start-up schools. The idea of starting a new school is both an exciting and an overwhelming thought. Most teachers only think about taking such a bold step on Friday nights with colleagues over a beer while complaining about poor policies, kids they aren't reaching, and lack of resources.

In Chicago, hundreds of teachers and principals and their central office counterparts have done more than dream. They've invested enormous time and energy in thinking about, planning, and then carrying out their own ideas about how best to serve students within the parameters of the Chicago Public Schools. These professionals constitute a tremendous resource, and they have demonstrated some skill in creating the conditions that hold kids in schools and engage their interest. We want to isolate the conditions that need to be in place to encourage hundreds more teachers and principals to take this challenge seriously.

Minimal Conditions for Start-up Are as Follows:

Advanced Planning Time. If the purpose of the school is to create different kinds of learning opportunities for children, the adults in the school need time to envision those differences and to plan for them. The less planning time the staff has, the more likely it is to repeat common forms of schooling, to re-create systems and practices with which they were familiar in more traditional, larger schools. When we visited a school where advanced planning time was provided, the stability of the school was qualitatively different. Planning time affords the principal and staff time to form a unified team, to build mutual understandings about the mission of the school, and the means by which they might best bring the mission to bear for students. Further, longer lead time allowed staff to build structures, rules, consequences, and expectations for parents and families as well as for students. We would recommend that to facilitate their planning, hopeful staff be given a set of guidelines with deadlines, including things like a mission, standards, policies for students and staff, a school schedule, and curriculum so that they are able to allocate their planning time wisely. Teachers also need to be compensated for their time.

Stability. The more stability that can be provided to new schools, the more likely they are to make wise decisions and to create the kind of school that best addresses student needs. Far too many of the new schools we encountered lost staff, principals, and/or space during or at the end of the first year. It takes time to generate a sense of community, then a mission, and then instructional structures and practices to match the mission. As one staff member from a new school that had encountered significant instability during its early years commented, "It's just like starting from scratch" each year.

A Small Broad Community. The best of the schools have quickly developed a substantial and enduring sense of community. The faculty in these schools concentrate on creating an extended sense of community by including parents and external partners. Further, they figure out productive ways to work with the central board. In many small schools, parents are asked to enter into contractual agreements with their children regarding activities in the schools. Some of these may be as simple as signing students' homework or agreeing to encourage student attendance, while others ask parents to agree to a certain amount of service to the school community. Creating better relationships with parents initially helps to create a more serious academic tone. External partners were identified early on as essential to the school community.

Teachers from several small schools in the ethnographic sample explained that the support that their external partners gave them was invaluable. When possible, small schools need to cast a wide net of involved adults to support the youngsters in their school.

Student-Focused Curriculum, Pedagogy, and Assessment. In the best of the small schools, educators focused and structured their curriculum, instruction, and assessments to help the students they served. It does no good, they told us, to complain about the skills or the knowledge the kids don't have. The important thing is to figure out where the students are and start building from there. The teachers in the qualitative sample expressed the importance of incorporating student realities and interests into the curriculum, their instructional approaches, and the assessments. Throughout these schools, educators engaged students in cooperative learning groups, culturally appropriate curriculum, multiage collaborations, cross disciplinary projects, and performance assessments. All of these were designed to engage students, to ensure that they wouldn't settle for minimal performance or drop out.

Minimal Conditions for Ongoing Development

We identified six factors that help small schools to continue to improve and flourish. The academic benefits of the interpersonal relationships among small-school students, staff, and administrators are only a beginning. Further conditions need to be established inside and surrounding these small schools to ensure long-term viability and continuous progress toward heightened student achievement.

Use the Vision as the Compass. When small schools used their vision or mission as a tool to measure their own progress, they tended to get further than those who rarely referred to it after their initial planning stages. For example, at one high school, the mission statement declared that they would use best practices to engage kids. In staff meetings, faculty asked one another to identify practices they were using in an attempt to learn from one another. The vision influenced staff discussions, student/teacher interactions in the classroom, and parents' understandings of the school. In this case, the vision was an actual tool used to envision the school and guide the daily functioning. For a vision to reach its maximum potential, all invested stakeholders, including administrators, faculty, students, parents, community members, and external partners, should be in accord and involved in the processes of forming, implementing, and sustaining the vision. And the vision should be a tool under constant scrutiny and revision. As new staff members join, the vision needs to be revisited with them to incorporate their ideas and hopes.

Renegotiate Roles and Responsibilities. When the relationships among parents, external partners, and small schools were renegotiated regularly to assure that they were providing appropriate support to both the school and the students, we saw these relationships deepen. In the schools that had the most successful partner relationships, there was a great deal of continuous change in the types of resources that both parents and external partners offered the school. In the process of assessing the school's progress, parents and external partners were encouraged to keep changing their interactions with the school to suit its developmental needs. This ensured that everyone stayed fresh to the needs of the children.

Engage in Data-driven Decision Making. Many of the small schools looked at a variety of data sources to make decisions about where they would focus their energies, while others relied on current trends. Clearly, looking for evidence of problems from real sources of data within the school strengthened the resolve of both faculty and administrators to take meaningful steps to improve student conditions. In one school, test scores

revealed that reading comprehension was a greater problem than deciphering or decoding letters. So the faculty and administration used this information to build a multifaceted plan to work on reading comprehension. In another school, math scores were very low. Faculty members were networking through their external partners to find out what approach they might take to strengthen their own math skills and to provide a stronger instructional approach for their students. It was the data that fueled teachers' willingness to undertake solutions as a whole staff. When the whole group was working on a solution, students within the school got a more coherent message about what they needed to do to improve.

Couple Caring with Rigor. When we asked students what was most important to them about their small schools, they gave us two answers in equal measure. First they would say that their teachers cared about them, would give them extra time, would call their parents if they messed up, and so forth. In the next breath, they'd say that their teachers pushed them to do the work, kept on them, wouldn't take excuses. This combination of caring and rigor coincides with recent CCSR findings that "...[middle grade] students learn substantially more when they experience high levels of academic press and strong social support together, but they learn much less when they experience only one of these conditions." (Lee, Smith, Perry, and Smylie, 1999). "It isn't just that caring leads to rigor," explains one external partner. "It's caring in a skillful, organized way that gets kids deeply involved in what they are doing."

Build On-Going Student and School-Based Professional Development. In order for teachers to respond with ever-increasing skill to their students, they need their own rigorous, demanding, regular opportunities for growth and development. In some of the strongest small schools, we saw that faculty members worked hard to identify professional-development opportunities that helped improve the school, that strengthened their own professional skills, and positively affected student achievement. Too often, professional-development experiences are selected by teachers based on their own interests rather than on the needs of their students. In addition, too many teachers attempt to learn new techniques and approaches alone, rather than in the company of colleagues inside their school. Collegial interaction while learning new things can extend the depth of everyone's understanding.

It is folly for us to think that urban teachers are adequately prepared to face the current instructional, emotional and organizational challenges of urban education-no matter the length of their experience. Tackling this work requires a lifetime of skill building, refining, honing, reflecting and revising. Fortunately, in small schools, teachers seem up to the on-going work, better able to organize themselves collaboratively to build professional development opportunities that will best serve them and the students in their classes. Giving them greater agency and on-going, high quality professional development that emerges out of their identified needs is likely to lead to higher levels of performance from both adults and students.

Provide Enough Autonomy. When the small schools were guaranteed enough autonomy to bring their ideas to fruition, they were more invested in the school and its students. Many of the teachers and principals in these small schools were intellectually strong and found the problem-solving that came with creating their own schools very compelling. Ensuring that they have the opportunity to bring their ideas to fruition is an important incentive to encouraging teachers to undertake renewal and improved accountability within the system.

Cautions

Small is not enough. Too often, educators leap on anything that appears as if it might work, but it is important to bring critical judgment to the examination of small schools. Not all small schools are saviors. We found a range of quality in small schools. Some were only smaller in size and showed none of the differences in structure or practices that "smaller" can and must facilitate if the school is to be successful. Small size is a necessary but insufficient condition for school improvement. We believe that, if any small school does not meet its goals within a five-year period, it should not be sustained for its own sake. Small schools must be increasingly more productive places for young people or they should be dismantled and reconfigured. Similarly, if large schools deplete engagement, create disidentification, risk damage to human relationships, and cannot support high student achievement, then they too should be subjected to the same kind of scrutiny and the same consequences for underperformance. Why is it that we have for so long tolerated organizational designs that have proven to fail students, teachers, principals, and parents so miserably? Since small schools have been growing in a climate of intense scrutiny; it seems only reasonable to suggest that large schools should be subjected to the same scrutiny, the same standards of evaluation. Why should we evaluate only innovation and not the status quo?

Fragility is an important feature. One of our most provocative findings was that small schools appeared fragile. Many closed during our two-year study. Others nearly collapsed when a principal or a teacher left. We must be careful not to interpret this as a weakness. In part, small schools are fragile because of the ecology of the schools themselves; they are more interdependent by their very nature. The key factors that make them work for teaching and learning are also what make them more difficult to sustain. And small schools might seem fragile when viewed against larger schools, which in their "stability" seem impervious to change despite poor performance and decades of attempted reform.

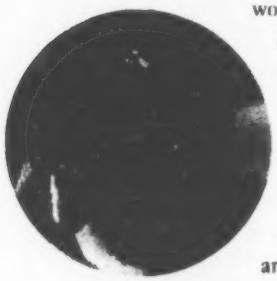
Small Schools as a Panacea. We realize that there are a number of pressing issues facing the educational community. We have a number of colleagues who are doing terrific work to ensure that all students have highly qualified teachers. We agree that teacher quality is a critical factor in the success of any school, and that small schools are no exception. There are other colleagues who feel that principal and superintendent leadership should be the focus of national attention at the moment because again, the shortages are acute and we have years of data that suggest that principals are critical to the success of any school. Again, we agree and would add that the principal's role in small schools is absolutely critical to the development of a successful school. We believe, however, that smaller school size can facilitate leaders' abilities to lead a school to improved performance and teachers' abilities to build student skill and knowledge in important ways. Small schools make collaboration among the adults much more possible. Such collaboration is important to generating a mission and goals for the school, and then developing the kinds of practices, procedures, and policies that bring such a mission to fruition. Further, small school size, as mentioned earlier, makes it far easier for teachers to build coherent experiences—experiences that build from one class to the next and from one year to the next. It is important to avoid seeing small schools as the sole solution to all that ails education. Rather, we would suggest that it is a key ingredient in a comprehensive plan to improve education.

Nor would we want to suggest that all schools in the country ought to be small schools. Because children differ so much, those that thrive in larger settings should have the opportunity to do so. We would prefer, given the poor record of large urban schools, that the ratios be reversed—making small schools the norm, and large schools the exception.

Finally, for the last ten years, many have invested enormous energy into the development of standards.

These colleagues believe that setting and demanding higher standards will move us to the more powerful system we need. Recently, as the results of high stakes tests have been scrutinized, many are beginning to see that setting higher standards was and continues to be an important step towards systemic improvement. But it, like small schools, is a necessary but insufficient step. Teachers, principals, and children need additional support in order to meet higher standards. We believe that reducing school size and providing the support that teachers and principals need in order to build programs that work for kids will help us eventually to meet the new standards we've set for our children and our schools.

The system must change. It is also important to realize that small schools are difficult to sustain because they are a genuine innovation within the larger system. The Chicago Public Schools system has been very courageous in struggling to make small schools work within the larger system. Any system considering a move to small schools will have to confront the need to rethink and redesign major policies and common practices, since most of those principles were designed for larger schools. To make a difference, any genuine change must provoke a larger change in the way the overall system does business. And it will make new demands. When large systems respond, those changes themselves become an organizational intervention. Clearly, the Chicago school system is taking the next step, restricting all new school size in order to capitalize on the successes that have accrued from the schools that exist. Vallas's response reflects the kind of courage that larger systems need to make to ensure a systemic approach.



Recommendations

The data are compelling. To make the success we've seen in Chicago available to all, there are important steps to be taken by all the stakeholders in the educational enterprise.

For governors, legislators, and chief state school officers. Provide funds for state-level efforts to reduce the state's largest schools. Work to reduce the bureaucratic constraints that prevent educators from creating smaller schools that are responsive to local student and family needs. Provide incentives for districts to create smaller schools. Provide state-level symposia on the use of data to drive instruction; on looking at student work in the context of standards; and on building reading strategies for older students. Fund capacity building organizations that can provide important external partners to the new small schools.

For funders: Provide matching seed money for state and local initiatives. Fund additional research that will enable us to understand the benefits and the challenges that arise as we attempt to create smaller schools. Develop initiatives to network new schools so that they can learn from one another. Provide additional support directly to new schools, as they need all kinds of resources if they are to be both innovative and more rigorous.

For districts: Provide waivers for smaller schools that release them from conflicting district policies; schools should be freed from policies requiring a particular curricular approach until such time as the school has demonstrated that its own approach isn't working. Separate schools-within-schools from their host schools, so that they are not subjected to the same kinds of policies as their larger, failing counterparts. Allow schools to negotiate student admissions procedures in keeping with the district's policies regarding equity. Redesign support for professional development that is building based and focused on the particular skills and knowledge students need.

For external partners: Establish policies that will allow corporate and other community agencies to work in public schools. Think broadly about the kinds of roles partners might play in schools. Get to know the teachers, families, and children inside your partner schools so that you can make the best determination about your role in providing assistance. Prepare to redefine your role each year as the school changes.

For colleges and universities: Engage current small-schools educators in the redesign of teacher, principal, and superintendent preparation programs so that these programs reflect current exigencies. Prepare teachers and principals to develop the skills they need to work in smaller contexts: collaborative skills, communication skills, conflict-management skills, and so forth. Engage with small schools in action research to enable data-driven decision making. Conduct reciprocal research that will help the small schools understand their strengths and weaknesses.

All schools need what small schools need. What we discovered is that some of these needs may be easier to identify and meet in small schools. The impact of the interventions to improve achievement may be easier to discern and measure in small schools. Small schools provide the labs or the microcosms to take a closer and clearer look at urban schools in general. The needs of small schools are not outrageous or luxurious, just clearer. Teachers frequently claim that if they had fewer students and more professional development, student achievement would improve. Small schools have the potential to provide all teachers with just those conditions.

It is difficult to write our conclusions in a neutral and objective tone. We cannot ignore the backdrop against which small schools are being evaluated. We are loath to critique the large schools we did not study, but we know a great deal about them from the picture that youngsters and teachers in small schools paint of them. We are also familiar with larger schools thanks to the research and reform efforts in Chicago and across the country. From that larger perspective, if small schools are making a dent in the currently catastrophic conditions, that must be not only celebrated but replicated. Given what they are up against, any improvements small schools achieve in climate or stability or persistence rates are a triumph. Small schools put students and teachers into organizations that we can more reasonably hold accountable. We suspect that organizational design—like large size—is a significant intervening variable that prevents us from dealing more effectively with many of the problems facing urban schools. And size is an organizational factor we can control. Small schools clearly provide advantages in school safety, in engaging student interest and persistence. But most important, small schools provide a reasonable setting to build the capacity of students and teachers to engage in the longer-term effort that increasing achievement and school reform demand.

This may be the most powerful aspect of small schools as a reform strategy. They provide the opportunity to build on the abilities that everyone involved brings. Principals do that by creating settings that have vision, coherence, and responsiveness. Teachers do that in their ability to analyze student skill development and design instructional programs that target the interests and the needs of their particular students. Parents and other partners do that as they develop a growing respect for and a broader sense of the ways in which they can contribute to the school. Students do that when they begin to see themselves as deserving of and capable of a decent, rigorous education. Together, small schools create a site where ability, skill, and passion are nurtured to lead and foster individual and organizational change. In Chicago, small schools have yielded impressive gains for students. Because we believe that the gains made are important and impressive, we hope that many other urban centers will have the courage to follow Chicago's lead.

Candace, a tenth-grade student in a small school, leaned forward to describe why her school worked:

> *"Kids can feel when teachers care about them, when adults are for them. In our small school, we have a school that is for peace, understanding, hard work, kids going places. The teachers and all the other people — they get involved with us, give us as many possibilities as they can fathom. That's why we're gonna make it. You're gonna see us again."*

endnotes

1 Small Schools or schools hosting small schools were excluded from the calculation of the system average in this section.

2 This academic advantage persists even when the small academic magnets are removed. Thirty-eight percent of students attending historically small schools scored at or above national norms in reading when small academic magnets were excluded.

3 Conventional schools are ones that are not small and do not contain Schools Within Schools (SWS).

4 The student mobility rate is based on the number of students who enroll in or leave school during the school year. Students may be counted more than once. These analyses used the school mobility numbers published by Chicago Public School (CPS).

5 Due to the small number of high schools possessing small schools and the small number of high schools in Chicago, the statistical significance of results needs to be balanced against absolute effect size. The small number of schools means that only moderate to very strong effects will be found statistically significant.

6 Test scores on the Iowa Test of Basic Skills (ITBS) and TAP, the standardized tests used in Chicago, are reported in grade equivalents. A difference of one on the grade equivalent scale can be interpreted as meaning a difference in one grade of learning. For instance, if SWSs' average achievement was one grade equivalent greater than that of conventional elementary schools, this would be interpreted as meaning students attending SWSs on average demonstrated they had a full school year's more skills than students attending conventional elementary schools.

7 Students who left the system to attend other schools or because they moved out of Chicago were excluded from the calculation of dropout rates.

8 The attendance rates of SWSs founded after 1998 were not significantly different from those of the system or their host school. Students enrolled in these SWSs, however, attended almost one-and-a-half more days of school a semester than students attending their host school. This finding indicates that it may take small schools time to build a school identity strong enough to change students' day-to-day behavior. SWSs, however, tend to lower absenteeism, versus their host school, relatively quickly.

9 If the dropout rate of high schools with SWS founded in 1998 and 1999 are included when calculating average system dropout rates, the difference between SWSs and the rest of the system drops to approximately three percent. Figure 4 includes 1998 and 1999 small schools in calculating the system average.

10 If students attended high school for only one semester, their course failure rate for that semester was multiplied by two.

11 Multischool students tended to fail at approximately the same rate as the system, 39.6 percent versus 40.6 percent.

12 Students who failed to pass the promotional requirement but were promoted by the central office were not included in these analyses. In addition, the students who left the system during the year were excluded from the sample.

13 If a school had 15 percent or less of its students scoring at or above national norms, it was placed on academic probation.

14 The retention policy was implemented fully in the 1996-1997 school year and began to impact high school scores in 1998.

15 Because the two buildings divided into multischools act uniquely, their results are not reported. These are reported in the companion technical report.

16 We controlled for the number of years students attended high school so we could analyze all high school students together.

17 In Chicago, a school is generally not held accountable for the test scores of special education students and students with four years or less of bilingual education.

18 Only two high schools with SWSs responded to the 1999 survey. SWS students responded only slightly more positively than students attending their host schools.

19 Although the small schools had higher scores than most schools on the measure, the variance among high schools on the measures were small. This means the large differences represent small to moderate differences in the actual school communities of the high schools.

20 Although freshman academies were not considered small schools based on the criteria of this study (because they only serve students for one year), CPS still considered them to be small schools.

appendix A

Control Variables used in HLM Analyses

Elementary Schools

Level 1: Student Controls

1) Students' race. Students were categorized into five groups: African-American, Latino, Asian, Native-American, and White
2) A composite measure of the social and economic conditions of the neighborhood[1] in which students lived. The measure combined the following indices: percent public aid 1997, 1994 rate of crime, concentration of poverty, and social status
3) Whether the students' family moved the summer before or during the school year analyzed
4) Whether students entered or re-entered the school system over the summer or school year or lacked a residential address
5) Grade Level

For Measures of Growth & Retention

1) The students' previous ITBS test score.

Level 2: School Level Controls

1) Racial composition of the School. School were grouped into four categories: Predominantly African-American, Predominantly Latino, Racially Integrated, and Predominantly Minority
2) Average economic and social conditions of the neighborhoods in which students' attending a school resided
3) Percent Special Education.

Level 3: Building

1) The social and economic conditions of the neighborhood around the school
2) Whether the school is an academic magnet

Notes:

1) The analyses of achievement only included students from the third through eighth grades because this aligns with CPS Board Policy. Analyses with first and second graders were conducted to determine if the trends were the same across grades. The results for the third through eighth grade and first through eighth grade analyses were comparable.
2) Analyses of students' one-year academic growth only included students who were continuously enrolled in their school for the full academic year. Mobile students were excluded because it would be unfair to hold schools accountable for a student who received little or no instruction from the school in which they were tested.
3) Other measures of school characteristics such as Percent Low Income or Mobility were used in some descriptive analyses.

1 Demographic information about the neighborhood around students' homes was drawn from analyses of the census block group or census tract in which the student lived.

High**Schools**

Level 1: Student Controls

1) Students' race. Students were categorized into five groups: African-American, Latino, Asian, Native-American, and White
2) A composite measure of the social and economic conditions of the neighborhood[2] in which students lived. The measure combined the following indices: percent public aid 1997, 1994 rate of crime, concentration of poverty, and social status
3) Whether the students' family moved the summer before or during the school year analyzed
4) Whether students entered or re-entered the school system over the summer or school year or lacked a residential address
5) Grade Level

For Measures of Growth, Dropout Rates, Attendance, and Failure Rates

1) Controlled for the students' eighth grade achievement.

Level 2: School Level Controls

1) Average of students eighth grade math and reading achievement for each school
2) Average economic and social conditions of the neighborhoods in which students' attending a school resided
3) Percent Special Education

Level 3: Building

1) The social and economic conditions of the neighborhood around the school

Notes:

1) Analyses of Dropout, Attendance, and Grades were conducted both controlling for and not controlling for eighth grade achievement.We employed a multi-methodological approach, collecting both quantitative and qualitative data to investigate our research questions. With the quantitative data, we compared small schools to other CPS schools as well as to their host schools. The qualitative analysis examined the conditions that enabled small schools to become educationally effective and equitable.

The remainder of this section describes the sampling processes and rationale for the quantitative and qualitative data sets.

2 Demographic information about the neighborhood around students' homes was drawn from analyses of the census block group or census tract in which the student lived.

appendix B
Methodology

QuantitativeMethodology

Quantitative Sample

The quantitative data were used to determine who small schools were serving, how small school environments differ from that of larger schools, and if small schools facilitate higher levels of academic achievement. These analyses informed larger questions regarding systemic reform: can small schools be a systemic approach? Under what conditions can small schools successfully revitalize a school system?

A major focus of the study was to identify the small schools that existed in Chicago and to track the progress of students attending these schools. When we initially proposed this project, we failed to appreciate the complexity of Chicago's small schools. In Chicago, over 90 percent of the small schools are SWSs that do not have an independent budget, are governed by their host school, and lack an administrative unit number. This was problematic because there was no established method in the CPS for tracking the year-to-year progress of students attending small schools that did not have unit numbers. Using information collected by the CPS about small schools in 1997 and 1999, we were able to track small school students by linking their classroom or division number with the SWS they attended. Due to the low response rates to the 1998 CPS small schools survey, this survey was not used in the study.

Part of our challenge was to make a clear determination about what constitutes a small school. Our fieldwork and quantitative data revealed that educators disagreed over the definition of a small school. For instance, in 1997, elementary and high school teachers throughout Chicago were asked if their school contained or hosted a small school. In 43 elementary schools and 16 high schools, fewer than 75% of teachers in a school answered in a consistent fashion. Moreover, comparisons of the CPS's 1997 and 1999 small schools surveys, the Consortium on Chicago School Research's (CCSR) 1997 teacher survey, and CCSR's 1999 principal survey revealed that school administrators, principals, and teachers identified overlapping but different groups of small schools. Our fieldwork also revealed that some of the schools that were identified as SWSs operated more as programs than as schools.

Schools were included in the quantitative database only if they self-identified as a small school on the 1997 CPS survey and they were identified as a small school by at least one of the following data sources: 1999 CPS small schools surveys, CCSR's 1997 Teacher Survey, or Small School Directories provided by the Small Schools Workshop (SSW) and Business and Professional People for the Public Interest (BPI). By using two distinct pieces of information to identify each small school, we attempted to exclude programs such as honors programs or special education programs that had erroneously been reported as small schools in the 1997 CPS survey.

One hundred and forty-three small schools located in 54 buildings were included in the quantitative part of the study. At the elementary level, the sample consisted of 32 SWS located in 23 schools, 54 SWS located in 12 multischools, and 5 freestanding schools. At the high school level, the sample consisted of 22 SWS located in 8 schools, 27 SWS located in 3 multischools, and 3 freestanding schools. In addition, 5 new small elementary schools and 3 small high schools that opened in 1998 where also included in the 1999 analyses. These new schools included three small elementary schools, one small high school, and two combination junior high and high schools that were opened in 1998 under Illinois' new charter legislation.

In addition to the small freestanding schools that opened in 1998, a large number of new SWS were founded between 1998 and 1999. Fourteen elementary schools and eight high schools that did not report hosting SWS in 1997 reported hosting new SWSs in 1999. Moreover, 13 elementary schools reported that they had reorganized themselves completely into small schools since 1997. This report, however, primarily focuses on the small schools that existed in 1997 for two reasons. First, we believed small schools needed time to organize themselves before

they were thoroughly examined. Second, in 1999, we were unable to compile as many outside small school databases to help distinguish SWSs from school programs. Therefore, the analyses of the 1999 new small schools may be confounded because the chance of school programs being erroneously labeled small schools is greater.

Once we compiled the 1997 sample of small schools, we were left with the task of creating an appropriate comparison group. Should students in small schools be compared to their peers in host schools? In neighborhood schools? In the entire district? In the suburbs? Realizing that each comparison has methodological, political and ethical implications, we made the following choices. To the extent possible, they are compared to (a) students attending their host schools and (b) non-small elementary and high schools in Chicago. For SWSs, this dual lense enabled us to simultaneously assess whether SWSs were working to improve the achievement levels of the schools in which they were located and how SWSs' performance compared with other schools in the system.

Early analyses found that small schools focus on lower-achieving schools, are more likely to be located in African-American schools at the high school level, and serve lower percentages of special education students. Moreover, the students attending SWSs differed significantly from students attending their host school on some variables. In order to control for these and other differences between and among small schools and other CPS schools, comparisons among small schools, their host schools, and other schools in the system controlled for differences in students' characteristics, the schools' student composition, and the neighborhood in which the school was located (See Appendix A for a list of control variables).

Databases: Data

The quantitative analyses were based on five databases:

- Chicago Public Schools (CPS) 1997 and 1999 Small Schools Survey—In 1997 and 1999, CPS asked all public elementary and high schools to report if they hosted SWSs. This database identified small schools in Chicago and the students who attended them. To ensure high response rates, the 1999 CPS small schools survey was conducted in three stages. Schools were first sent a brief one-page survey asking them to identify the small schools inside their school. Schools that failed to respond to the survey were then phoned. Finally, CPS staff contacted schools that reported containing small schools in 1997 and failed to respond to the survey in 1999. This method produced an almost perfect response rate of 99%.
- Consortium on Chicago School Research (CCSR) 1997 Student and Teacher Surveys, and 1999 Student and Principal Surveys — In 1997, CCSR conducted a survey of all the teachers in the CPS and 6th, 8th, and 10th grade students. Four hundred and twenty-two of 477 elementary schools and 55 of 67 high schools participated in the survey. The survey measured a wide range of organizational, instructional, and social characteristics of schools such as student safety, level of trust among teachers, and the coherency of instructional programs in the school. In 1999, CCSR expanded the student survey to include 7th and 9th graders as well as 6th, 8th, and 10th graders. Seventy-three percent of the elementary schools and seventy-six percent of the high schools participated in this survey. Most of the scales used in the 1997 survey were also used in the 1999 survey. Unfortunately, insufficient 1999 teacher responses to the small schools questions prohibited us from conducting longitudinal analysis on teacher's attitudes. In 1999, CCSR also surveyed 61 percent of elementary school principals and 67 percent the high school principals. Their responses were used to explore how small schools administratively operated.
- CPS Administrative Files — The CPS administrative files provide information on the status of all students attending a Chicago Public School between 1991 and 1999. The files were used to calculate dropout rates, derive school mobility rates, and track students attending small schools.
- CPS Standardized Test Files — The test database used in the study contains the test results of all students tested between 1996 and 1999. Longitudinal analyses of the ITBS and TAP scores are problematic because they

were not designed to measure longitudinal changes in students' or schools' performance. Different non-equivalent forms of the ITBS and TAP test have been administered between 1996 and 1999. Therefore, improvements or declines in achievement over time may result from differences in the test forms as well as real changes in academic performance. At the elementary level, CCSR has addressed this problem by equating the different forms of the ITBS using item response theory techniques (Bryk, Thum, Easton, & Luppescu, 1998). When performing longitudinal analyses of the ITBS data, our study utilized the CCSR achievement measures instead of the raw scores in order to control for the differences in the ITBS test forms. No equated measures for the TAP were available.

Quantitative Outcomes

This study assessed whether small schools engendered stronger learning communities, whether students remained in school at greater rates, and whether students achieved higher levels of academic achievement (e.g., better scores on standardized tests).

Measures of School Community

The strength of a school's community was assessed using an evaluative model created by CCSR. The Consortium on Chicago School Research posits that high levels of school achievement as well as the ability of a school to improve its educational effectiveness are supported by five characteristics of a schools' environment: school leadership, parent and community partnerships, student-centered learning climate, professional development and collaboration, and quality instructional programs. A school needs to possess each of these five essential elements in order to foster high levels of academic achievement among their student body (Sporte et al., 1995).

Since higher levels of the five essential supports are related to higher levels of academic performance, we compared the school climate of the small schools to that of their host and the average school in the system using measures such as school safety and professional community. These analyses enabled us to determine if small schools were building school environments that would favor high levels of academic achievement in the near future. Since the vast majority of small schools in the study were only one to two years old at the beginning of the study, we were concerned that the length of the study would only be sufficient to detect changes in the environments of small schools and may be insufficient to detect significant increases in small schools' academic achievement.

Measures of School Progress

Chicago has recently implemented a new "no social promotional" policy for third, sixth, and eighth graders that require the students to achieve a certain score on the ITBS test before they are allowed to progress onto the next grade. In addition, CPS has implemented a new range of graduation requirements at the high school level.

At the elementary level, the study analyzed retention rates and stability rates of small elementary schools. For instance, the study assessed whether attending a small school changed a students' likelihood of being retained in third, sixth, and eighth grade. Second, research documents the negative effects changing schools has on students' level of achievement and the disruptive effects it has on the schools they leave (Kerbow, 1995). Since the closer relationships in small schools may encourage students to stay at the same school, the study examined whether small schools are more stable than other schools once residential instability is controlled.

In concordance with previous research, we believed that the closer and more personal relationships found in small high schools would enable them to lower their dropout rates. In order to test this argument, we compared the dropout rates of small high schools with the dropout rates of their host school or other high schools in the

system. The study also examined students' high school transcripts in order to determine if students attending small schools failed fewer courses than students attending larger high schools.

Measures of Academic Achievement

The relationship between small schools and their students' performance on the ITBS and TAP test was assessed in order to determine if small school size fostered higher levels of academic achievement. In Chicago, elementary and high school students are required to take standardized tests that measure their math and reading skills. Most third through eighth grade students are required to take the Iowa Test of Basic Skills (ITBS) reading and math sections every year[3]. Moreover, a large majority of first and second grade students also take the ITBS. At the high school level, ninth and eleventh graders' math and reading skills are measured using the TAP, and in 1999 tenth graders were also tested.

Both the absolute level of students' achievement and their growth (e.g., the difference between their performance on the 1999 and 1998 tests) were analyzed. Analyses of students' growth as well as their absolute achievement levels were assessed because growth analyses reveal how much a school adds to a students' knowledge over the course of the year. In contrast, the absolute measure of achievement penalizes schools that receive students with extremely low academic skills. In this case, regardless of how much the school teaches the student over the course of the year his or her score will still be low. For instance, if a school educates students who enter the school one and a half year behind grade level and teaches them one and half years worth of material in their first year, those students will still be a grade behind grade level at the end of the year even though they learned a tremendous amount of material during the school year. Only after two or three years in a high achieving small school will these higher than average growth rates accumulate to the point where the students' absolute achievement reaches grade level. It is important to measure students' academic growth as well as academic achievement because academic growth measures the amount of material students are learning during the academic year at a school.

Absolute measures of achievement, however, are also important because Chicago has established criteria that certain levels of achievement are unacceptable for any child. Therefore, regardless of how much a student learned in one year, certain absolute levels of skills are just unacceptable for students at a certain age. A balanced picture of school achievement can be achieved by analyzing both academic growth and absolute levels of achievement.

Analytic Strategy

The data was analyzed using a statistical method called Hierarchal Linear Modeling (HLM). This method provides the most appropriate method to analyze information that is nested within a variety of levels or groups. For instance, in this study, students attending small schools are first grouped by the small school they attend and then these small schools are grouped by the larger schools or buildings that host them. By incorporating the nesting of the data in the analyses, many analytical advantages are gained. For instance, one can determine how much of a students' academic achievement is related to individual characteristics such as SES or organizational characteristics such as crime in the school neighborhood (Bryk & Raudenbush, 1992). In this study, a three-level HLM was used to analyze most of the outcomes. One major advantage of this model was that it enables simultaneous comparisons between the performance of small schools, their host school, and other schools in the system.

In the discussion section of this report, however, we also present the unadjusted profiles of the schools. This is important because some schools may appear to be outperforming their host and even the average school in the system, but be performing extremely poorly on an absolute level.

3 Bilingual students with less than 3 years of bilingual education and special education students are not required to take the test

Qualitative Sampling

The qualitative data were used to address the following research questions. In regard to student achievement, what are the effects of small schools on student achievement?, and what are the variety of indicators that allow us to understand student achievement, and what are their effects? In regard to leadership and instruction, what changes are teachers and principals making in small schools that they believe positively impact student achievement? These data further helped us to think about the questions regarding systemic reform, specifically, under what conditions can small schools successfully revitalize a school system?

Selection Process

When this study began, a comprehensive list of small schools, and their academic performance did not exist. In order to identify the schools from which the ethnographic sample was chosen, the research team engaged in a two-stage process. First, key participants in Chicago's small school movement who represent a variety of reform groups such as the Small Schools Workshop, Leadership for Quality Education (LQE), Business and Professional People for Public Interest (BPI), the Small Schools Coalition, the Quest Center, and Chicago Public Schools (CPS) were interviewed. The interviewees were asked to identify small schools that had interesting programmatic focus, organizational structure, or history. Twenty-five schools located throughout Chicago were identified. The second stage involved arranging site visits and gathering information on the schools' student bodies, missions, staffing, partnerships, and academic performance. Members of the research team visited 22 of the 25 schools. Three schools were not visited because they were either closing the following year or the research staff was unable to gain access to the schools.

Synthesizing information from the interviews and site visits, the research team used a number of factors, which we hoped would yield a broad representation of small schools in Chicago. We considered a variety of factors when selecting the schools such as whether the schools received Chicago Public School funds for start-up costs (RFP vs. non-RFP schools), origin of school (by teachers, principals, university, community groups, etc.); location; external partnership; racial/ethnic composition of students; grade levels and type of school (e.g. freestanding, school-within-school, etc.).

We selected eight schools that we found to be both representative and generative. By representative we mean that those selected reflect the range of forms of small schools in Chicago. We have included freestanding schools, multiplex and scatterplex schools, schools on probation, schools that are geographically distributed across the city, those enrolling predominantly poor and working class African-American and Latino students; elementary/middle, and high schools. By generative, we mean a set of schools that demonstrate how "small" enables quality instruction and improved outcomes.

Although small schools have existed in Chicago for a long time at the elementary level, the more recent small schools movement has targeted more impoverished neighborhoods and more students of color. Further, the vast majority of small schools formed under this movement were new, and not yet stable. Coupling of "small" with "new" raised concerns that the possible positive effects of size may be overshadowed by basic organizational tasks that often absorb new schools. In an effort to minimize this problem, the selection process focused on finding small schools that promised stability.

We followed these eight schools closely, both qualitatively and quantitatively. In addition to interviews, observations, and focus groups with the administrators, teachers, and students, we also created a quantitative profile of each school that was tracked over time.

appendix C

Glossary

Organizations

BPI	Business and Professional People for the Public Interest
Consortium (also CCSR)	The Consortium on Chicago School Research
CPS	Chicago Public Schools
LSC	Local School Council
LQE	Leadership for Quality Education
SSW	Small Schools Workshop
Small Schools	Elementary schools that serve 350 students or less and high schools that serve approximately 500 students
Freestanding	Buildings with their own space, budget, and principal.
Historical	Freestanding elementary schools created before 1990, that are not alternative or special education schools that serve more affluent populations.
Schools-Within-Building (SWB)	Schools that are housed in buildings with other schools in either a multiplex or school-within-school arrangement.
Schools-Within-School (SWS)	Schools that are housed in other buildings in either a host-small school relationship or in a multischool arrangement.
Multiplex	Schools that share a building and a principal, but have their own unit numbers and operate independently from other schools in the building.
Multischool	A form of the school-within-school where the entire building is reconfigured into SWSs.
New	Small schools created from 1990 and on.
Scatterplex	Schools that have their own space and budget, and share a principal with schools at different sites.

Disciplinary**Actions**

Early Academic Warnings

Schools are designated for this list based on their low performance on the state assessment, formerly called the IGAP, now called the ISAT. A substantial majority of the schools on this list are located in Chicago. Some of them are selected to receive the assistance of a state service provider, Project Jumpstart. Schools that do not move off the Warning List are eligible for the State Watch List.

Reconstitution

A process, used thus far only in 1997, where CPS closed seven high schools. Teachers and administrators were required to reapply for their jobs. In response to criticism about the process, CPS has moved to a policy of "re-engineering." Here, a joint committee of teachers and administrators must write and implement an improvement plan and offer peer assistance to unsatisfactory teachers.

Remediation

Also known as "C schools," remediation schools are those whose ITBS test scores decline by 2 percent or more for two consecutive years. Remediation schools are asked to write a corrective action plan and they are assigned someone from the Department of School Intervention to monitor their reading improvement plan. There are currently seven schools on the remediation list. Schools that remain on the list for more than three years are eligible for probation, even if their scores do not fall below 20 percent of students reading at or above grade level.

Probation

Probation schools are those with 15 percent or fewer of its students reading at national norms on the Iowa Test of Basic Skills. To move off of academic probation, schools must have 20 percent or more of its students reading at norms. In 2000, these criteria will rise to 20 and 25 percent respectively. These schools receive assistance from an external partner and monitoring of the improvement effort from a probation manager. Since 1996, 133 elementary and high schools have been placed on academic probation. 53 elementary schools and 11 high schools have successfully moved off of probation.

appendix D

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